

Site Assessment



Right Tree-Right Place Florida Urban Forest Council



Robert J. Northrop
Extension Forester



Seeing the forest for the trees and visa versa



City In the Forest

*Urban and Community Forestry
The Landscape Spectrum*



Site Assessment Varies by Geographic Scale

- Single tree
- City
- Ecological region



Site Assessment Single Tree – Below Ground

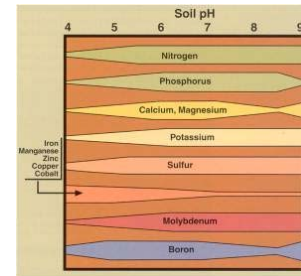
1. Soil pH
2. Soil texture
3. Soil drainage
4. Soil volume
5. Soil bulk density
6. Built infrastructure



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Site Assessment Single Tree – Below Ground

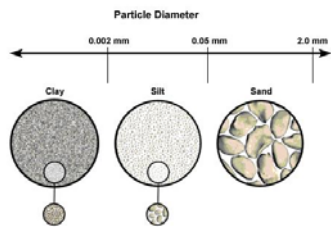
Soil pH



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Site Assessment Single Tree – Below Ground

Soil texture



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Site Assessment Single Tree – Below Ground

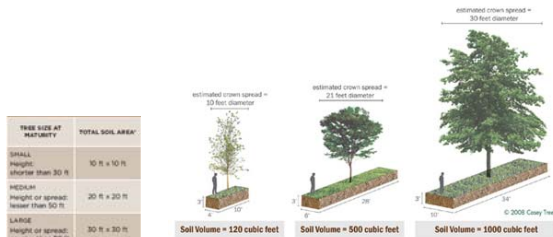
Soil drainage



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Site Assessment Single Tree – Below Ground

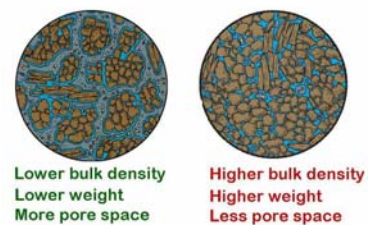
Soil volume



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Site Assessment Single Tree – Below Ground

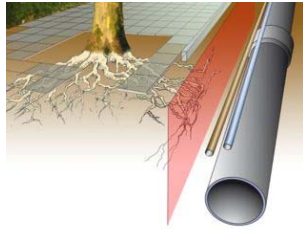
Soil bulk density



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Site Assessment
Single Tree – Below Ground

Below ground
urban infrastructure



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Site Assessment
Single Tree – Above Ground

1. Buildings and other structures
2. Overhead utility lines
3. Signs and lights
4. Paved surfaces



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Site Assessment
Single Tree – Above Ground

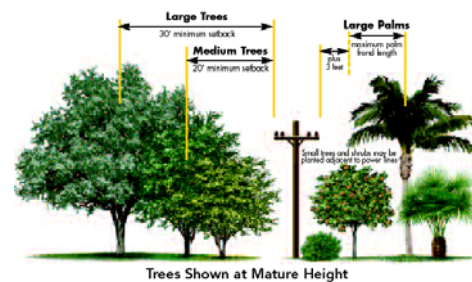
Buildings and other
structures



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Site Assessment
Single Tree – Above Ground

Overhead utilities



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Site Assessment
Single Tree – Above Ground

Signs and lights



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Site Assessment
Single Tree – Above Ground

Paved surfaces



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Site Assessment Single Tree – Environment

1. Cold hardness
2. Available sunlight
3. Artificial light
4. Amount and periodicity of rainfall
5. Prevailing wind patterns
6. Strong storms
7. Air pollution
8. Salt



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Site Assessment Single Tree – Environment

Cold hardness



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Site Assessment Single Tree – Environment

Available sunlight



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Site Assessment Single Tree – Environment

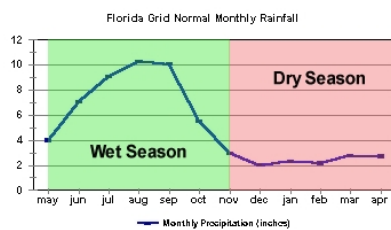
Artificial light



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Site Assessment Single Tree – Environment

Amount and periodicity of rainfall



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Site Assessment Single Tree – Environment

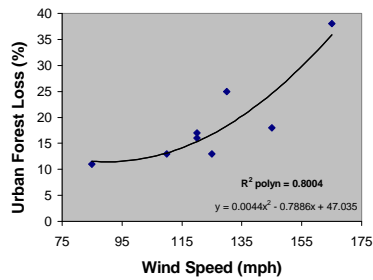
Prevailing wind patterns



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Site Assessment
Single Tree – Environment

Strong storms



Site Assessment
Single Tree – Environment

Air pollution



Site Assessment
Single Tree – Environment

Salt



Site Assessment
Single Tree – Environment

1. Wildlife
2. Tree litter
3. Diseases and insects



Site Assessment
Single Tree – Environment

Wildlife



Site Assessment
Single Tree – Environment

Tree litter
and pollution



Site Assessment
Single Tree – Environment

Diseases and insects



Site Assessment
Citywide

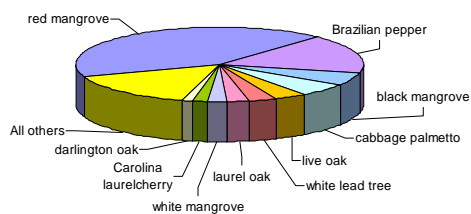
1. Diversity vs. Monocultures
2. Native vs. exotic
3. Invasive species
4. Transportation corridors



Site Assessment
Citywide

Diversity vs monocultures

Percent of Top Ten Species in the City of Tampa (total # stems)



Site Assessment
Citywide

Native vs non-native
and invasive species



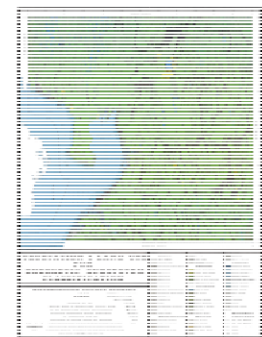
Site Assessment
Citywide

Transportation corridors



Site Assessment
Ecological Region

Conservation of
regional biological
diversity



Natural Design and Urbanization?

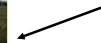


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The future of our forest ecosystems



- Vigorous and diverse
- Actively regenerating
- Nutrient assimilating
- Temperature regulating
- Deliberately patterned
- Resistant and resilient



Site Assessment



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