

# City of Tampa's Urban Forest Management Plan

November 2013

Southern Group of State Foresters  
– Urban Forestry Winter Meeting



*City of*  
**Tampa**  
Florida

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**UF** | **IFAS Extension**  
UNIVERSITY of FLORIDA



# Brief History of Urban Forest Conservation in the City of Tampa

1946

## Spare That Tree, City Shouts

By BILL BLALOCK  
Tribune Staff Writer

Tampa's new city ordinance to curb the chopping-down of trees lining the streets is proving a boomerang against Park Superintendent Sanborn who promoted it.

It apparently has aroused the desire of many Tampanians to become woodsmen and hack down trees they never paid any attention to before.

"It means," said Sanborn, "that it made many Tampanians tree conscious, or it's just another evidence of the way Americans kick against any kind of prohibition."

And some of them get their Irish up when the park department won't bounce out and whack down a tree they've decided must go.

### Hundreds Complain

Hundreds have suddenly found that trees fronting their places are unsightly, or they are creating a nuisance by lifting the sidewalks, and should be removed.

Sanborn points to a growing pile of daily requests for permission to chop trees down, as they pour in from all over the city.

The ordinance says that trees or shrubbery cannot be planted or removed from the parkways along the streets without permission of the park superintendent. It assumes no obligation on the part of the city to do the chopping, or planting.

### Call for Axes

"But a lot of people seem to think it's now the city's duty to cut the trees down for them," Sanborn said.

HEY LOOKIT,  
BOY HAVE I GOT  
FIREWOOD



"We are getting plenty of demands that we come out with our axes.

"However, the only time we permit trees to be cut down is when they are either dead or prove to be a hazard to traffic by screening a corner, or some other way."

The ordinance gives the park superintendent the authority to remove trees or plantings from the parkways if they are found to be not in keeping with the general beautification scheme of any particular street or portion of it.

"That, however," said Sanborn, "must be decided by the park board, and not by me."

Thus, he explained, when people get an itch to remove trees on the grounds they are not beautiful, all they can do is file for permission to chop them down.

Sanborn then passes the request

along to the park board, and if they approve, the tree can be take-out.

As for sidewalks being cracked by tree roots, that can be handled by expert removal of the offending root, with no harm to the tree.

The ordinance against reckless tree chopping came about through sponsorship and backing given Sanborn by the Tampa Federation of Garden Clubs as a means of preserving any claims the city might have to beauty.

### Cut Down Old Ones

Some fine old trees were being hacked down, and on Davis Island, a resident or two decided to replace the stately palms with oaks, which they did.

In Seminole Heights one day, Sanborn said he came upon two men busy at a giant old, shady oak with a saw. They explained they were cutting it



## **Brief History of Urban Forest Conservation in the City of Tampa – cont'd**

**1972** – Planning Commission drafts the 1<sup>st</sup> Tree Preservation Ordinance

- Protected Trees on Public and Private Properties
- Created the City of Tampa, Tree Board

**1984** City of Tampa annexes 40 square miles of forest and agricultural lands which became New Tampa

Ordinance revised to address conservation of forested natural areas proposed for development including:

Canopy retention, Protection of Grand Trees, Wetland Buffers, Tree Protection Standards and Technical Manual

## **Brief History of Urban Forest Conservation in the City of Tampa – cont'd**

**1998** – 1<sup>st</sup> Urban Ecological Analysis/Urban Forest conducted by the University of South Florida (City Green)

**2006** – 2<sup>nd</sup> Urban Ecological Analysis/Urban Forest was initiated by the City of Tampa, City Council (UFORE)

# Project Rationale

**City Council directs city government to conduct an urban forest analysis every five years**

- Specifically
  - % Canopy Cover (trees)
  - Assessment of Ecological Health
    - Tree Species Richness
    - Age/Size distribution
    - Urban Forest Condition
    - Non-native Species Status
  - Economic Benefits

City of Tampa  
Urban Ecological Analysis 2006-2007

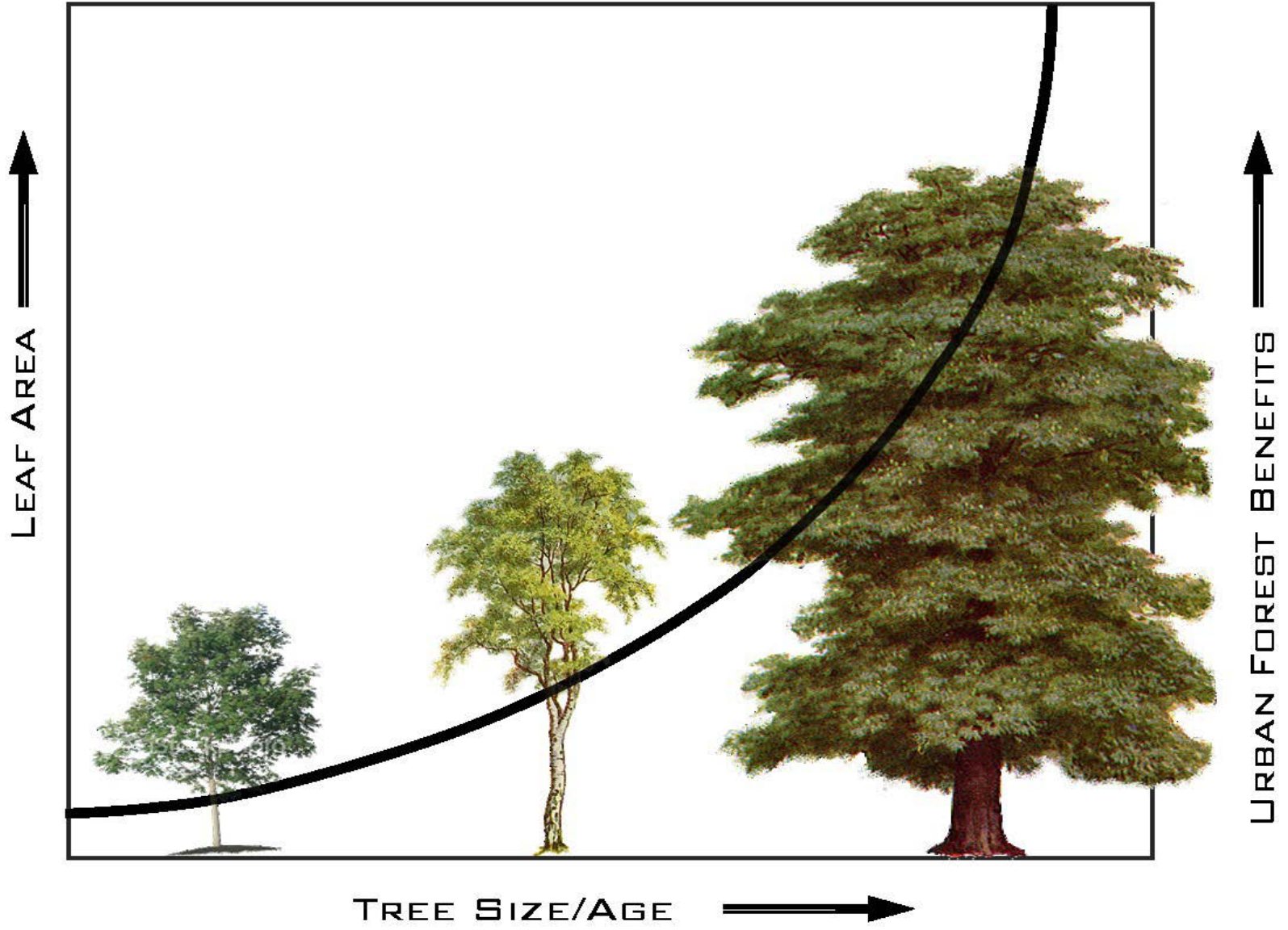


# City of Tampa Urban Ecological Analysis 2006-2007



# 2006 Urban Ecological Analysis

<b>Feature</b>	<b>Measure</b>
<b>Number of Trees</b>	<b>7,817,408</b>
<b>Tree Cover</b>	<b>29%</b>
<b>Top Tree Species</b>	<b>Brazilian pepper, cabbage palm, laurel oak</b>
<b>Proportion of Trees &lt; 6-inches DBH</b>	<b>84%</b>
<b>Air Pollutant Removal</b>	<b>1,360 tons/year (\$6.3 million/year)</b>
<b>Carbon Storage</b>	<b>511,141 tons (mkt. value)</b>
<b>Gross Carbon Sequestration</b>	<b>46,525 tons/year (mkt. value)</b>
<b>Compensatory Value</b>	<b>\$1,465,600,097</b>
<b>Value of Energy Conservation</b>	<b>\$4,205,623</b>





# **Vision - the Steering Committee on Urban Forest Sustainability**

Maintain and expand Tampa's urban forest in recognition of the many benefits it provides, including: enhancing quality of life for present and future citizens, attaining numerous economic and ecological benefits Nature provides, and seizing opportunities to better understand our natural environment through scientific research and public education.

# Goals Identified by the Steering Committee on Urban Forest Sustainability

1. Biodiversity / Habitat
2. Education / Research
3. Forest / Tree Maintenance
4. Public / Private Partnerships
5. Regulation / Incentives
6. Sustainability

Collaboration is necessary for long-term urban forest planning and management.



**People - Institutions - Science**



# **Guiding Principles Used by City of Tampa**

- derived from Vision Statement and Broad Goals

1. Government Efficiency
2. Economic Growth
3. Public - Private Partnerships
4. Increase the social, environmental and economic benefits of the urban forest by reducing costs
5. Support Communities
6. Support Basic Tenets of the City's Comprehensive Plan

# Criteria define essential elements against which urban forest sustainability can be judged.

Each criterion is defined by a key objective.

Criteria	Key Objective
Species suitability for Tampa's climate zones	Establish a tree population suitable for Tampa's urban environment and adapted to the regional environment.
City natural resource and forestry staffing	Employ and train adequate professional staff to implement citywide urban forest management plan.
General awareness of the urban forest as a community resource	The general public understands the importance of the urban forest to the community.
City public agency cooperation	Ensure all city departments cooperate with goals and objectives of the UFMP.

# Performance Indicators

Criteria: **Species suitability for Tampa's climate zones**

Key Objective: **Establish a tree population suitable for Tampa's urban environment and adapted to the regional environment.**

Performance Indicators			
Low	Moderate	Good	Optimal
Less than 50% of trees are of species considered suitable for Tampa.	50%-75% of trees are of species considered suitable for Tampa.	More than 75% of trees are of species considered suitable for Tampa.	At least 90% of the trees are of species suitable for Tampa.

# Alternatives for Action

Specific actions, policies or programs (total of 178) expected to incrementally move the performance indicators to the next highest level.

- The complete set was reviewed and edited by all city departments.
- A set of preferred alternatives for action were chosen to guide the first 5-year planning horizon.
- The set of preferred actions and intended outcomes are to become part of the annual departmental operational plans and individual work plans.



## Criteria and Performance Indicators



Kenney et al. 2011

→ **Alternatives for Action**

20-year Strategic Plan –  
broken into four 5-year Management Plans

**Adaptive Management**

# 1<sup>st</sup> Five Year Urban Forest Management Plan

## **VEGETATION CRITERIA 1 –**

Species suitability for Tampa's climate zones

## **KEY OBJECTIVE –**

Establish a tree population suitable for Tampa's urban environment and adapted to the regional environment.

### **Preferred Alternative for Action and Year to be Accomplished**

1 – Prepare a Land Development Regulation (LDR) that requires the use of the City of Tampa Tree Matrix as a guidance document for all tree planting projects required through code or through use of public funds tree planting projects. PD, \$, MC

# City of Tampa's Tree Matrix

Scientific Name

Common Name

Plant Family

Florida Native

Mature Spread

Mature Height

Growth Rate

Soil pH

Drought Tolerance

Salt Tolerance

Root Salt Tolerance

Wind Resistance

Flood Tolerance

Soil Area Req'd

Distance from Paved Surface

Street Tree Use

# 1<sup>st</sup> Five Year Urban Forest Management Plan

## **COMMUNITY CRITERIA 2 –**

### **Neighborhood Cooperation**

#### **KEY OBJECTIVE –**

At the neighborhood level, citizens understand and cooperate in urban forest management.

#### **Preferred Alternatives for Action and Year to be Accomplished**

1 – Prepare and implement the Neighborhood Tree Stewardship program to educate residents on tree care and the urban forest. PD, \$, MC

1 - Prepare and maintain an interactive urban forest website for City of Tampa's residents. PD, \$, MC

# Neighborhood Tree Steward Program

Example of classes available:

1. Planting site assessment
2. Tree selection
3. Tree planting
4. Pruning mature trees
5. Preventing damage to sidewalks, curbs and driveways
6. City of Tampa tree ordinances
7. Identifying opportunities for financial and technical assistance for neighborhood-wide tree programs



Login Sign up Add a Tree

Home About Resources Explore Trees Contact

Search by Location: Hyde Park Preservation, Inc. Search for a Species: All trees Search Tampa

1,116 trees selected

(reset search)

Add a Tree!

Yearly Eco Impact

Selected trees in Hyde Park Preservation, Inc.

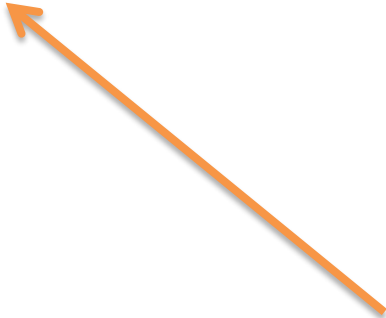
- Total Benefits: \$95,192 saved
Greenhouse Gas Benefits: 619,262 lbs CO2 reduced, \$24,770 saved
Water Benefits: 5,952,340 gallons conserved, \$59,523 saved
Energy Benefits: 75,711 kWh conserved, \$9,085 saved
Air Quality Benefits: 40 lbs pollutants reduced, \$1,813 saved

Map showing tree locations with a pop-up for 'live oak' (Quercus virginiana) at 846-898 South Dakota Avenue. Includes details like trunk diameter, height, and eco impact.

Locate Me

Export this search: KML | CSV | Shapefile

**Year 1** - Create an **Advisory Committee on Natural Resources**, consisting of a balanced representation of the City's economic, environmental and social interests, to assist the Planning and Development Department on an annual basis in making recommendations as part of the adaptive management strategy for implementation of the UFMP



**Year 1** - Establish an **Internal Technical Advisory Committee**, comprised of appointed departmental representatives. The committee will meet quarterly to review progress, as part of the adaptive management strategy, identify issues and make recommendations associated with the successful implementation of the UFMP. The Planning Division Manager or Director of Department of Planning and Growth shall chair and facilitate the committee.



**Adaptive Management**

## Criteria and Performance Indicators



→ **Alternatives for Action**

Kenney et al. 2011


20-year Strategic Plan –  
broken into four 5-year Management Plans


**Adaptive Management**

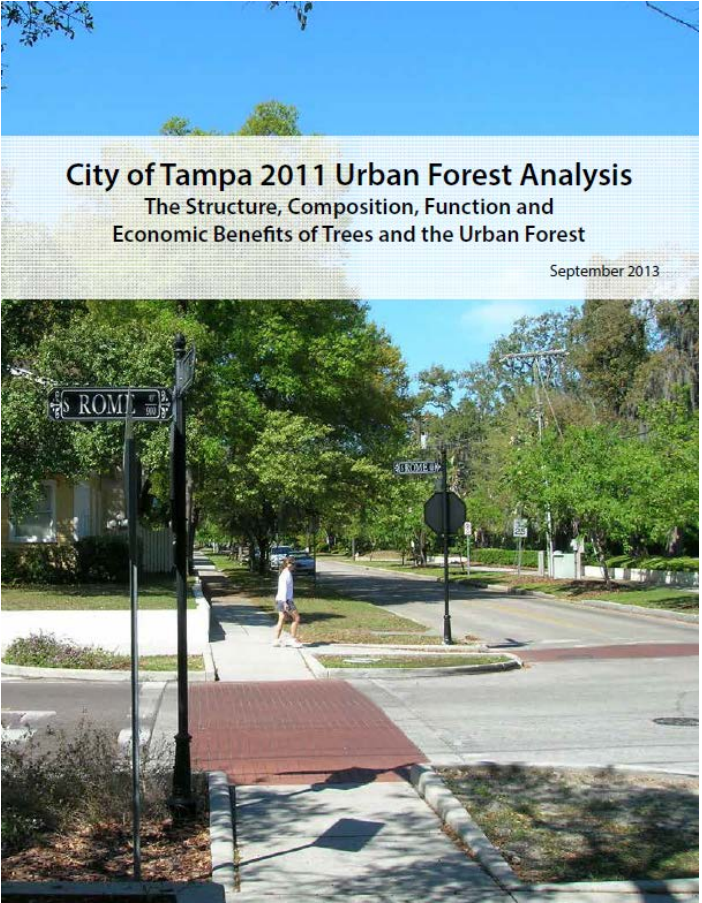


# Tampa's 5-year Cycle of Urban Forest Analysis Provides Critical Information for Assessing the Impact of the Urban Forest Management Program

**City of Tampa  
Urban Ecological Analysis 2006-2007**



**PARKS RECREATION**  **USE UNIVERSITY OF SOUTH FLORIDA** **UNIVERSITY of FLORIDA**



**City of Tampa 2011 Urban Forest Analysis**  
The Structure, Composition, Function and  
Economic Benefits of Trees and the Urban Forest

September 2013



*City of*  
**Tampa**  
Florida



**Tampa Bay**  
**Watershed**  
FOREST WORKING GROUP