FOR230

UF UNIVERSITY of FLORIDA
IFAS Extension

Comparison of Community Leader Perceptions on Urban Forests in South Florida[1]

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Urban Forests in Florida: Comparing Community Leader Perceptions of Benefits, Costs, and Hurricanes

An urban forest is composed of all the trees and associated understory plants growing in urban areas, including streets, yards, parking lot islands, parks, rights-of-way and other natural areas within the urban environment. Research has shown that urban forests provide many benefits to city dwellers including temperature and energy use reduction, improvement of air and water quality, reduced crime and improved aesthetics, all of which can increase property values (Escobedo and others 2008). However, the preservation and maintenance of urban forests costs money, and the costs must be planned and budgeted for (Escobedo and Seitz 2009). To create, maintain, and preserve urban forests, it is important that urban foresters, arborists, planners, and land managers who deal with trees understand what residents, community leaders and decision makers think about trees, including how much they value them. This fact sheet will compare the results from a survey conducted in Broward and Hillsborough Counties in Florida. We will share initial insights into one group of community leaders' perceptions and beliefs regarding urban trees in Florida and beyond.

The survey for the two counties was conducted using mail surveys that asked Homeowner Association (HOA) Leaders a series of questions concerning perceptions and attitudes about the benefits and costs of establishing and maintaining urban forests. The survey used a 5-point scale to assess the level of importance for specific urban forest benefits and costs. Two nominal groups of HOA leaders from suburban and urban Hillsborough County were used to develop the survey (Northrop and others 2008). Six hundred and forty one surveys were mailed in Hillsborough County in 2007 and 577 in Broward County in 2008. Mailing lists were provided by the local county Extension offices and municipalities. Twenty two and 27 percent of all mailed surveys were returned in Hillsborough County and Broward County, respectively.

Table 1 summarizes the top five most frequent responses (in numerical order) received from both Florida counties. The table shows that, in general,

1. This document is FOR230, one of a series of the School of Forest Resources and Conservation Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date December 2009. Visit the EDIS Web Site at http://edis.ifas.ufl.edu.

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Broward County HOA leaders, who were directly affected by the 2004 and 2005 hurricane seasons, perceive the same benefits from the urban forest as HOA leaders in Hillsborough County who were not directly affected by hurricane force winds during the same period. With the exception of shade, the benefits perceived by HOA leaders of both Florida counties were different than results from a national survey on people's perceptions of trees (Lohr and others 2004). When asked about the concerns of the urban forest, results differed slightly between Florida counties and national results. Broward County respondents indicated that three of their four greatest cost concerns were hurricane-related. In Hillsborough County, only two of the top four cost concerns were associated with hurricanes. Although the national study is different from this survey, it might indicate how Florida's unique geography and climate makes people perceive urban forests differently from people elsewhere in the United States.

the Broward and Hillsborough results reveals that Broward and Hillsborough County respondents recognize hurricanes as a major cost associated with urban forests. By contrast, respondents in the national survey, listed storm damage to power lines as their only concern related to storms. Clearly, there is a perception among HOA leaders that the cost of maintaining trees is related to the frequency of storms. This is not surprising given the greater frequency of hurricanes in Florida, and south Florida (Broward County) in particular. Memories of the destructive forces of hurricanes Frances and Jeanne in 2004 and Wilma in 2005, which affected Broward, but not Hillsborough County, still loom large.

It is interesting to note that none of the top benefits of trees mentioned by Florida HOA leaders included noise and dust mitigation, which were two of the top four benefits cited in the national study. This might be explained by the relative absence of high-polluting heavy industry in most of Florida,

Table 1. Comparison of the Benefits and Costs of the Urban Forest to Homeowner Association Leaders from Broward and Hillsborough Counties and Urban Residents in a National Study Ranked in Order of Importance.

Broward County	Hillsborough County	National Survey[1]
Benefits of Urban Trees		
1. Provide shade	1. Improve aesthetics	1. Provide shading and cooling of buildings
2. Improve aesthetics	2. Provide shade	2. People feel calmer
3. Provide unique community character	3. Increased property values	3. Reduce smog and dust
4. Increased property values	4. Provide unique community character	4. Reduce noise
Costs of Urban Trees		
1. Hurricane damage from trees	1. Hurricane damage from trees	1. Allergies
2. Tree damage to sidewalks, roads, driveways, and foundations	2. Falling branches and trees on power lines	2. Block signage
3. Falling branches and trees on power lines	3. Tree damage to sidewalks, roads, driveways, and foundations	3. Cause cracks in the sidewalk
4. Falling branches and trees on property and cars	4. Block signage	4. Damage to power lines

From: [1]Lohr, V.I., C.H. Pearson-Mims, J. Tarnal, and D.A. Dillman. 2004.

When asked about the costs associated with urban forest, results differed slightly between Florida counties and national results. Broward County respondents were concerned with the threat of branches and trees falling on property and cars, while in Hillsborough County the concern was trees blocking signs. Comparison of the national survey to

unlike urban centers in California, the Northeast and the midwestern United States.

The Broward County and Hillsborough County HOA leaders were also asked to rate factors that might influence their support for increased tree planting and maintenance programs in their

communities (Table 2). Respondents in both counties agree that hurricane damage, root damage to infrastructure and the cost of maintaining trees would be very important considerations when thinking about creating or expanding urban tree planting and/or tree protection programs.

forest they will support, how much of it they want and where to preserve existing trees and/or plant new ones. This data can then be used to develop management goals and design educational campaigns to promote greater awareness of the benefits of trees and show how to minimize associated costs.

Table 2. Ranking of the Top 5 Statistically Significant Factors that Affect Support for Creation, Implementation, or Expansion of Tree Planting Programs by Homeowner Association Leaders in Broward and Hillsborough Counties.

Broward County	Hillsborough County
1. Hurricane damage	1. Hurricane damage
2. Root damage to infrastructure	2. Root damage to infrastructure
3. Falling branches/trees on property/cars	3. Falling branches/trees on property/cars
4. Monetary cost of maintaining trees	4. Monetary cost of maintaining trees
5.Tree sap and pollen on cars	5. Raking and disposal of leaves

When asked if they would like more trees planted in their communities, responses between counties differed (Figure 1). Respondents in Broward County showed a greater interest in tree planting than did Hillsborough respondents. This might be due to a greater appreciation for trees due to Broward County's lower tree canopy and associated tree losses from the recent hurricanes. More Hillsborough HOA leaders needed additional information to decide about whether to plant trees than did respondents in Broward County.

Survey results suggest that for the most part, Broward County HOA leaders perceive the same benefits from trees in their communities as do HOA leaders in Hillsborough County. Conversely, in the national survey, environmental benefits such as noise and air pollution reduction as well as the costs due to tree allergies were more important than in the two Florida counties. Hurricane damage was the biggest concern for both groups of Florida HOA leaders.

The results from this survey suggest that people's perceptions of the benefits and cost of managing urban forests are affected by diverse factors and can include: climate, urban morphology, cultural and socioeconomic background, as well as the current state of the vegetation in their community. Studying community leader's perceptions towards trees can provide valuable insights regarding a community's beliefs, educational needs and attitudes for funding urban forest initiatives. Knowing their desires and concerns can help determine what type of urban

Understanding key stakeholders' perceptions of trees could also lead to promoting greater perceived value on the part of voters and decision-makers. Their additional support could pave the way for greater resources to expand and protect urban tree canopy in Florida.

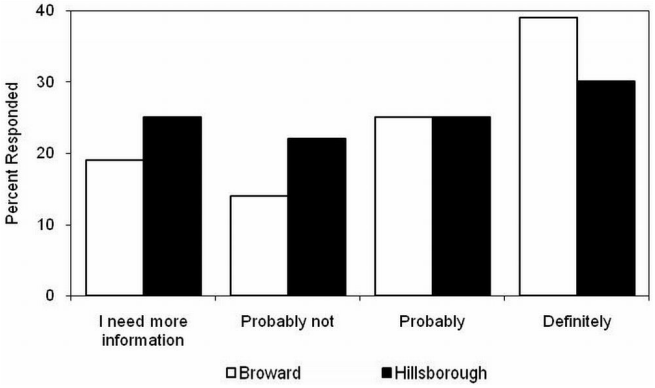

Figure 1. Comparison of Homeowner Association Leaders Desire to Increase Tree Cover in Their Communities in Broward and Hillsborough Counties Florida.

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