



Community Views of Urban Forests in the South Bronx, New York

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The Importance of Urban Forests

Urban and community forests play an instrumental role in the social, economic, and environmental well-being of urban residents. In urban environments, healthy community forests require ongoing stewardship as well as cooperation at governmental, organizational, and community levels. Local resident participation in the planning, planting, and management stages of forest care is essential to urban forest sustainability. The communal nature of urban forests provides many additional positive outcomes such as increased community cohesion, motivation, and empowerment. To encourage participation in community forestry, positive attitudes of the public towards trees and education about the benefits they provide is essential. To determine the potential for resident stewardship of urban trees in New York City and the need for educational programs in the future, we sought an improved understanding of current perceptions of urban forests.

Research Methods

To evaluate current awareness of and attitudes towards urban trees among South Bronx residents, 87 on-site surveys and 2 focus group discussions were conducted in 2008 with adults 18 and older in the South Bronx neighborhoods of Hunts Point and Mott Haven. The sites were chosen due to previous Cooperative Extension education activities in these areas. On-site surveys were conducted in 5 locations: Hunts Point Farmers Market, Lincoln Hospital Farmers Market, St. Mary's Park, Barretto Park and Pedro Plaza Farmers Market. Two focus groups were conducted: one was held at Abraham House, a community service non-profit, (12 participants) and the other at the Pedro Plaza Community Garden (6 participants), both in Mott Haven. Survey and focus group participants were asked about their attitudes towards trees, perceptions of the benefits and challenges associated with trees as well as perceived problems associated with existing trees. In addition, they were asked about their interest in participation in tree planting, stewardship and education programs, and preferences for educational

information. This research was conducted under Institutional Review Board for Human Participants Approval Protocol ID # 0908000460.

Respondent Demographics

The gender of the respondents surveyed was roughly equally split, with 54% females and 46% males. Most respondents were under 25 (27.6%) or between 35 and 44 years of age (20.7%). Sixteen percent were 25-34 years of age, 13.8% were 45-54 years of age, 14.9% were 55-64 years of age, and 6.9% were 65 years of age or older. Hispanics and African-Americans were most represented in the respondent pool, with 43.7% and 36.8% respectively. White was the next most commonly reported ethnicity (9.2%), with a small percentage reporting Native American/Alaskan Native (4.6%), Asian/Asian-American (1.1%), or Other (4.6%). Twenty-eight percent of participants reported a highest education level of 9th-11th grade and an equal percentage reported either a 12th grade/GED level or some college (24.1% for both). Approximately ten percent of respondents reported a 4-year college education level, and small percentages reported an educational level of post 4-year college graduate (8%), 8th grade or less (3.4%), and 2-year college graduate (2.3%).

How do residents feel about trees in their neighborhood?

Most residents reported that they liked having trees in their neighborhood (94.3%). Counts are out of a total 84 respondents to this question, with multiple responses permitted. The most commonly reported benefit of trees was their ability to reduce flooding by taking up rainfall (33 residents), followed by their ability to help clean the air (11 residents), provide food and shelter for animals (5 residents), and to provide areas for people to relax (3 residents). Forty-seven residents reported no benefits from trees. The most commonly reported challenges associated with trees was that they drop too many leaves in the fall (27 residents), followed by obstruction of vehicles and views from home (14 residents) and attraction of animals that are a nuisance (14 residents). Forty-eight residents reported no harm resulting from trees.



In the Abraham House focus group discussion, residents reported that they appreciated the shade-providing and fruit-bearing qualities of trees. Though several participants were aware of the positive effects of trees on air and environmental quality, most were unaware of the rainfall management and erosion-preventing benefits of urban trees. A greater awareness about trees was observed in the Pedro Plaza focus group, with the key factor being the presence of a gardener's group and its educating and motivating influence on other community members. This group held workshops in their neighborhood to share ideas and knowledge on gardening and trees.

What is the perceived condition of neighborhood trees?

Residents reported that current trees were most commonly planted in parks (86.2%), community gardens (76.5%), in street tree pits (62.1%), and in the front and backyards of homes (57.5%), though agreement on this was less decisive. Two-thirds (66.7%) of residents agreed that more trees were needed in their neighborhood, and approximately the same proportion agreed that trees needed to be better maintained (Figure 1). Residents stated that they would like to see additional trees planted in parks and playgrounds (88%), though most also reported that trees should be planted along streets (78.2%) and outside public buildings such as schools, hospitals and libraries (75.9%) as well.

The most commonly reported problem associated with neighborhood trees was poor care and neglect. Most participants did not believe that illegal removal of branches was a problem in the neighborhood (Figure 2). The majority also did not believe that vandalism of trees was a problem, though opinion was more divided (Figure 2). Roughly half of participants cited injury (damage) from cars, trucks, or dogs as a problem for neighborhood trees. Focus group members at Abraham House cited lack of care, damage by vehicles and animals, vandalism and lack of information on how to report tree-related problems as obstacles to community forest health. In the Pedro Plaza focus group, it was reported that the tree-related problems could be addressed through the gardener's group.

What roles do trees play in the daily life of residents?

Survey participants were most likely to report that they visited areas with trees once or twice a month (58%), followed by everyday (17%), and once a week (17%). Only 8% of participants said that they never visited areas with trees. Relaxation was the reason most commonly reported for visiting areas with trees (75.9%), though getting together with friends and family (64.4%) and bringing children to play (59.8%) were also frequently cited reasons. Taking care of plants (18.4%) and exercising (33.3%) were less often cited as reasons that they went to areas with trees.

Figure 1: How do you feel about the number and condition of trees in your neighborhood?

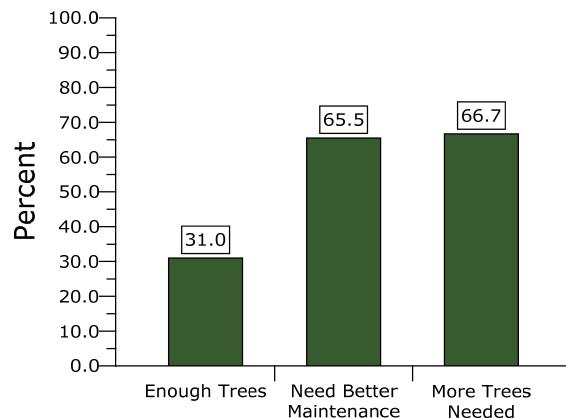
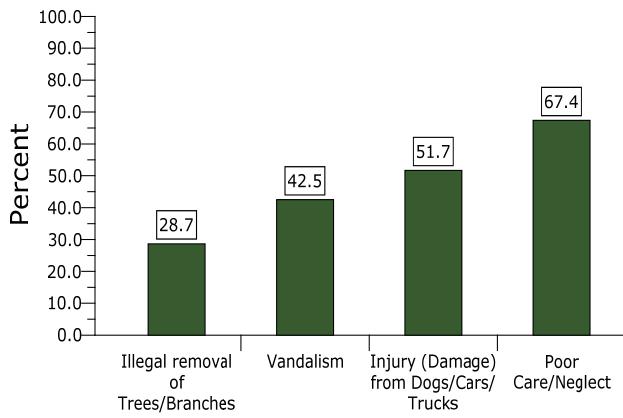


Figure 2: What are the main problems with trees in your neighborhood?



What are resident attitudes towards participation in community forestry?

Most respondents (82.8%) had not previously participated in a tree planting or tree care program in their neighborhood, but 76% stated that they would like to participate in such a program, should one take place in their neighborhood. The majority said that they would like to participate by planting trees, with many respondents also reporting that they would like to participate by caring for trees after planting, deciding where and which types of trees to plant, and by getting other people involved in programs (Figure 3). When asked about what type of information they would prefer as part of tree planting programs, respondents most commonly reported that they wanted to learn about the benefits of trees for the environment and public health (Figure 4). Many also reported that they would be interested in learning how to plant trees and how to take care of trees (Figure 4). Only 15% of participants stated that they had no interest in learning anything about trees (13 residents).

Figure 3: If there were a tree-planting program in your neighborhood, how would you like to participate?

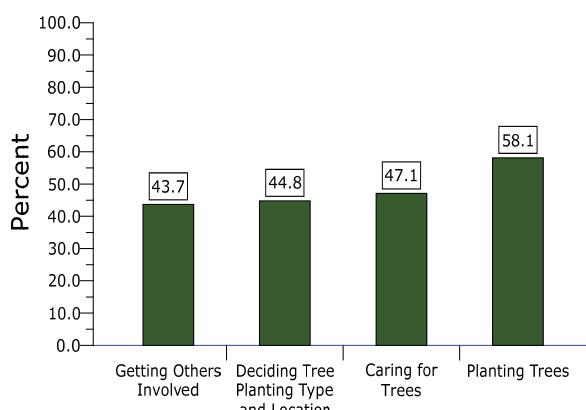
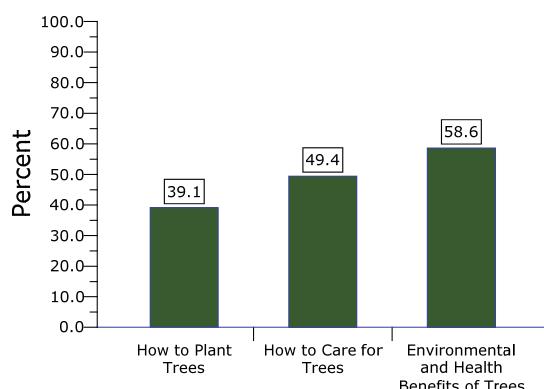


Figure 4: What do you want to learn about trees?



Conclusions and Policy Recommendations

We conclude that residents in the South Bronx neighborhoods where the study was conducted generally had a positive perception of trees. Residents expressed a desire for more trees in all parts of their neighborhood (schools, along streets, in parks, etc.). In addition, they thought that trees needed to be better maintained. While few residents had previously participated in a planting program, most were interested in doing so, should the opportunity arise. There was significant interest in learning about all aspects of tree planting and care, as well as the environmental and public health benefits of trees. Most participants visited neighborhood areas with trees at least once or twice a month, and few reported never visiting these areas.

Several implications for policy were determined. First, educational programs should include technical training for tree planting and care as well as education about the environmental impacts and multiple benefits of trees. Government agencies and residents should share responsibility for tree planting and tree care, and communities need more information about local agencies and regulations that protect trees against neglect, vandalism and other harmful behavior. Government and community efforts to expand tree maintenance are recommended to improve tree health. Tree planting programs should seek to address preference for shade, relaxation and play space for children. In addition, it must be emphasized that tree planting alone is not sufficient; post-planting care is essential, and greater resident involvement before and following tree planting is needed. Future research should continue to build the knowledge base on urban resident tree stewardship.

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