

MOTIVATIONS AND TASK PREFERENCES OF URBAN FORESTRY VOLUNTEERS¹

by Douglas T. Still² and Henry D. Gerhold³

Abstract. A study of reasons why people volunteer for urban forestry projects, and of their task preferences, compared the opinions and attitudes of volunteers with those of people in botanical organizations who might be considered likely targets for recruitment. A mail survey used membership lists of two tree volunteer organizations and one botanical garden in New York City, as well as one tree volunteer organization and one arboretum in Philadelphia. Members of the three tree volunteer organizations had completed a training course on tree care or inventory, and may not be representative of volunteers typically involved in single-day projects. Collectively, 1,038 people were sampled and 63% responded. Tree volunteers were predominately white, middle aged, well educated, and financially middle class. Improving one's neighborhood was the main reason for volunteering, followed by desire for education; social interaction was only moderately important. Respondents from all organizations considered tree care to be the most important urban forestry task. Volunteers thought tree care would provide the greatest personal satisfaction compared to other tasks, while potential volunteers thought planting trees would be most satisfying. Education was regarded as a highly important task to gain public support, even more important than tree planting. Respondents were least willing, by a large margin, to engage in fundraising or lobbying politicians. Both volunteers and potential volunteers were willing to perform a wider range of tasks than they have performed already, suggesting strong potential for increased involvement. Tree volunteers expressed a strong desire to increase their level of participation in the planning and decision-making of their projects. Less than half of the volunteers thought they had been recognized for their work in some way, but recognition was mostly viewed as unimportant. Respondents from all organizations felt that their urban forest was in rather poor condition, and that volunteers are needed to improve their city's trees. Four-fifths of potential volunteers have volunteered before in some way, indicating a general willingness for voluntary action by members of botanical organizations. Many current tree volunteers were self-motivated in seeking volunteer involvement; i.e., they responded to media announcements and volunteered without being personally asked. However, personal contact with potential volunteers is an effective recruitment technique for expanding the pool of volunteers beyond this self-selected group, as well as for increasing diversity.

Introduction

Growing interest in urban forestry volunteerism over the past twenty-five years has created new challenges about how to best recruit, utilize, and manage volunteers. Tree volunteers can become

not only a potent labor force, but public advocates as well for securing community support whether organized by municipalities, non-profit organizations, or neighborhood associations (3, 13, 37). Today's urban forest managers should seriously consider how to work with volunteers more effectively.

Volunteer recruitment and management strategies, case studies, and the benefits of urban forestry volunteerism have been well documented (2, 5, 14, 17, 20, 21, 22, 23, 25, 26, 27). On a more general level, volunteer issues are even more thoroughly discussed in the field of volunteer management (6, 11, 15, 16, 28, 32, 38). Most volunteer literature from all professional fields can be characterized as non-scientific, valuable, informed opinion based on experience in the field (see Still (34) for a comprehensive literature review).

However, there has been little empirical research based on urban forestry volunteers. In a systematic evaluation of the effectiveness of volunteers, Bloniarz and Ryan (4) determined that tree inventory data collected by trained volunteers were valid and accurate when compared to the data of a control group of Certified Arborists. Westphal (36) found that members of a TreeKeepers training course in Chicago were motivated to volunteer more by emotional, aesthetic, and psychological values of trees than by practical benefits (e.g., reduced temperatures or increased property values), indicating a predominance of "deep values" for trees (also in Dwyer et al. (10)). Sommer et al. (33) showed that proprietary values of residents in three Fresno, California neighborhoods were highest when citizens planted and paid for their own street trees. Knoke (18) found that communication and participation in decision-making by volunteers increases commitment to their organization, that involvement and responsibility increases membership support, and detachment occurs

²Graduate Assistant

³Professor of Forest Genetics

when there is an inability to influence organizational activities and policies.

To gain a deeper understanding of who urban forestry volunteers are, what motivates them to volunteer, and what they think about their activities, the study reported here was conducted with four objectives:

1) To provide demographic data for two tree volunteer organizations in New York City and one in Philadelphia.

2) To understand the reasons why members of these groups volunteered, and learn how they were recruited.

3) To learn about task preferences of tree volunteers and their attitudes toward involvement in volunteer organizations, including the importance of recognition and participation in planning and decision-making.

4) To learn if the attitudes and interests of tree volunteers are different from "potential" tree volunteers, i.e. members of a botanical garden and an arboretum who are possible targets for recruitment.

Methods

Mail Survey. In fall 1995 a mail survey was conducted using mailing lists of five organizations. Two New York City groups and one group from Philadelphia were tree volunteer organizations, while one group of "potential" tree volunteers from each city consisted of botanical garden/arboretum members:

1) *Trees New York/New York City Street Tree Consortium* is a non-profit organization founded in 1976 to promote the planting, protection, and care of street trees. A 12-hour course trains volunteer "Citizen Pruners" to prune and care for street trees from ground level.

2) *New York City Parks & Recreation 1995 Street Tree Census Volunteers* were trained and assigned neighborhoods in all five boroughs in which to perform an inventory of street trees in 1995 and 1996.

3) *Queens Botanical Garden*, having a membership of 500, is a display garden whose primary mission includes horticultural and environmental education. The Trees New York

"Citizen Pruners" course is offered at the garden.

4) *Treetenders* are a part of Pennsylvania Horticulture Society's Philadelphia Green program. Treetender volunteers complete a 9-hour basic course loosely adapted from Trees New York, TreeKeepers in Chicago, and Treemendous Maryland. Over 260 volunteers have completed the course since 1993.

5) *Morris Arboretum*, a 92 acre arboretum of the University of Pennsylvania located in Philadelphia, has a membership of 3,100. As an educational institution and historic public garden, its major activities include teaching, research, outreach, and display.

The potential volunteer comparison groups should not be considered representative of all potential volunteer recruitment possibilities. Garden/arboreta members were chosen because of their demonstrated interest in plants or horticulture, and the ready access to their names and addresses for a mail survey. This population is one type of targeted group, but may bear close resemblance to other groups such as garden clubs and horticultural societies.

Three systematic random samples of 200 names and addresses from Trees New York, Queens Botanical Garden, and Morris Arboretum, were drawn from mailing lists of 1,080, 494, and 3,200 names, respectively. A sample of 200 names taken from the Street Tree Census consisted (at the request of administrators) of all 141 volunteers who had completed their assignments and 59 others randomly selected from the remaining pool of 300 volunteers. The Treetenders sample included the entire mailing list of 238 members. A total of 1,038 subjects were included in the survey.

Each survey group received a slightly different questionnaire, designed following recommendations made by Dillman (9). Most questions were common across all questionnaires including reasons why respondents volunteer or would volunteer for tree work (measured by a twelve-item Likert scale); perceptions of urban forest condition and of volunteer utility (measured by an eight-item Likert scale); six questions about task preferences; and demographic information, including gender, age, length of residence, marital status, employment status, race, education level,

household income level, and other volunteer work performed. The three tree volunteer groups also had questions regarding length of membership, recruitment, participation in planning and decision-making, amount of work desired, and personal recognition.

Repeated mailings were employed using techniques derived from Dillman (9). A pre-tested questionnaire was mailed first with a prepaid business reply envelope, and a personalized cover letter which explained the purpose of the study and promised anonymity. One week after the first mailing, all subjects were sent a reminder postcard. Two weeks later an additional questionnaire was sent to those individuals who had not yet responded together with a prepaid business reply envelope and another cover letter making a stronger appeal.

Statistical Procedures. SPSS (29) was the statistical program used for all computations. The significance level used for all tests was .05, and two-tailed significance values were used for all t-tests and Mann-Whitney tests (1).

Factor analysis, using varimax rotation, was used to assist in building two Likert scales. Factors extracted had Eigenvalues greater than 1.00. Items with factor loadings of .50 or greater were used to interpret clusters of responses.

One-way analysis of variance was used to compare the mean scores among the five survey groups. The Scheffé multiple comparison procedure indicated which pairs of means were significantly different. T-tests were used to assess differences in mean scores between tree volunteers and potential volunteers, and between New Yorkers and Philadelphians.

Chi-square tests using the Pearson coefficient examined relationships between nominal question responses and demographic variables, survey group, tree volunteer status, and city. When relationships were found, Goodman and Kruskal's tau was calculated as a measure of association. Mann-Whitney tests (parallel to the Wilcoxon test) were used to determine differences between population distributions for two-category demographic variables on questions with ordinal categories. Kruskal-Wallis one-way analysis of variance tested for population distribution

differences between multiple survey groups on ordinal question responses. A Kendall's tau-b hypothesis test determined association between ordinal variables. The Pearson correlation was used as a measure of association between interval variables, as well as between question responses and the ordinal variables "education level" and "household income."

Results

Response. The overall response rate was 63% (n=630), and ranged between an 81% response from the Street Tree Census group and 41% from the Queens Botanical Garden, which might be attributable to an outdated mailing list. The New York City organizations had a combined response of 61%, while the Philadelphia organizations were at 66%. Tree volunteer organizations had a response rate of 70%, compared to 52% from "potential" tree volunteer groups.

Comparisons on all questions were made between the 223 questionnaires returned in response to the first mailing, and the 194 questionnaires returned after the third mailing. Only one question showed a significant difference at the .05 level, which suggests that, in addition to the high response rate, non-respondent bias had a minimal impact on survey results.

Demographics. The mean age for the entire sample was 50.6 years, ranging among individual organizations from 48.6 (Census) to 61.7 (Queens Botanical Garden). The mean ages of tree volunteers (48.4) and potential volunteers (55.4) were significantly different, as were the mean ages of New York City respondents (52.2) and Philadelphia area respondents (48.6). Only 13% of tree volunteers were younger than 35 years of age, and nearly half were between 35 and 50 years of age (43%). There were 22% of tree volunteers in their 50's, 15% in their 60's, and 6% older. For potential volunteers, only 5% of respondents were below the age of 35. Some 40% were between 35 and 50 years of age, 20% in their 50's, 16% in their 60's, and 18% were 70 years old or older.

A consistently higher percentage of women (59%) than men (41%) responded to the survey from all organizations. There was no significant association between gender and organization.

Table 1. Relative importance of reasons for volunteering (mean Likert scale scores†) according to volunteer status and city.

	Volunteer Status		City		All Groups
	Tree Volunteer	Potential Volunteer	New York City	Philadelphia	
Neighborhood Improvement	3.85	3.66*	3.80	3.78	3.79
Education About Trees/Nature	3.37	3.14*	3.33	3.27	3.30
Social Interaction	2.82	2.75	2.70	2.93*	2.80

† a score of 4 was assigned for "great," 3 for "some," 2 for "little," and 1 for "none"
* significantly different @ <.01

Most respondents were married or in a domestic partnership (59%), while 25% were single, 10% divorced or separated, and 7% widowed. Tree volunteers (54%) were less likely to be married/partnered than potential tree volunteers (69%), and New York City respondents (51%) were less likely to be married/partnered than Philadelphia area respondents (68%).

Both tree volunteers and potential volunteers were well educated across all organizations, with no significant differences among them. The highest percentage completed graduate school (41%), followed by college (35%), some college (17%), high school (6%), junior high (1%), and grade school (0.2%).

The majority of all respondents were employed (67%), with 4% unemployed, 20% retired, 2% students, and 7% homemakers. Tree volunteers were more likely to be employed (71%) than potential volunteers (59%). Furthermore, while similar proportions of tree volunteers (35%) and potential volunteers (36%) had fixed work schedules, tree volunteers were more likely to have full-time or part-time jobs with flexible schedules (26% and 11%, respectively) than potential volunteers (14% and 5%). The higher percentage of retired potential volunteers (28%) than tree volunteers (17%), particularly from Queens Botanical Garden (44%), is a reflection of their higher age. There were relatively few students in any group.

The racial composition of the survey was 91% white, 3% African-Americans, 2% Hispanics, 2% Native Americans, 1% Asian-Americans, and 1% "Other". The only significant relationship involving

race was a difference between cities. There were 88% white and 12% non-white respondents from New York City, compared to 95% white and 5% non-white respondents from Philadelphia. No significant differences were found in education or income between white and non-white respondents.

The majority of tree volunteers had household incomes in the \$30-49,000 (28%) or \$50-99,999 categories (35%). The three volunteer groups ranked considerably lower on household income than the two potential volunteer groups, particularly the Morris Arboretum, which had 36% of its members in the "Above \$100,000" category.

The average time of respondents' residence in their current neighborhood was 18 years for tree volunteers and 21 years for potential volunteers. The average length of residence in respondents' current metropolitan area was 34 years for tree volunteers and 44 years for potential volunteers, perhaps attributable to age differences.

Reasons for Volunteering. Respondents were asked how important each of twelve reasons for volunteering was for them personally, either "great," "some," "little," or "none". A factor analysis separated the reasons into three groups, which were then labeled as follows: "Desire for Education About Trees and Nature" consisted of "learning about trees", "learning new skills", "educating myself", "working with plants", and "bringing nature closer." "Desire for Social Interaction" included "meeting people", "getting to know neighbors", and "working with people." "Desire for Neighborhood Improvement" included "beautifying neighborhood", "improving neighborhood", and "improving the environment". One item from the original list, "serving the community," was dropped because it was only weakly related to the first two factors.

Overall, Desire for Neighborhood Improvement was of greatest importance to respondents with a mean of 3.79 (Table 1), followed by Desire for Education (3.30), and Desire for Social Interaction

(2.80). Tree volunteers gave greater importance to both Desire for Education and Desire for Neighborhood Improvement than did potential volunteers. Volunteer status made no significant difference in Desire for Social Interaction, but there was a difference between cities. Desire for Social Interaction was more important to non-white respondents than white respondents, and to respondents with lower household income. Desire for Education was somewhat more important to women than men, to non-white respondents, and to those with lower education levels and with lower household income. Women gave greater importance to Neighborhood Improvement than men.

Another group of eight statements addressed the usefulness of tree volunteers and the general condition of the urban forest. Respondents could answer "strongly agree," "agree," "disagree," and "strongly disagree." The factor analysis extracted three factors, labeled "Volunteers Are Useful," "City Trees are Healthy," and "Enough City Trees" (Table 2).

All survey organizations (mean score 3.22) agreed that volunteers can help city trees and that their city needs tree volunteers. Potential volunteers generally agreed that volunteers are useful, but tree volunteers agreed more strongly. Most respondents disagreed that their city's trees were healthy (1.87). Tree volunteers expressed this more strongly than potential volunteers, and Philadelphians disagreed more strongly than New Yorkers. All groups disagreed that their city had enough trees (1.57), especially tree volunteers. There were no significant differences among demographic groups for scores on these three factors.

Task Preferences. When asked to choose among seven tree-related tasks the ones they thought were most important and second most important, respondents selected "tree care" by a wide margin (73%). "Education" was placed as

Table 2. Relative agreement with positive statements about utility of volunteers and condition of city trees (mean Likert scale scores†) according to volunteer status and city.

	Volunteer Status		City		All Groups
	Tree Volunteers	Potential Volunteers	New York City	Philadelphia	
Volunteers Are Useful	3.32	3.02*	3.21	3.24	3.22
Trees Are Healthy	1.83	1.96*	1.93	1.79*	1.87
Enough City Trees	1.54	1.63*	1.60	1.53	1.57

† a score of 4 was assigned for "strongly agree," 3 for "agree," 2 for "disagree," and 1 for "strongly disagree"

* significantly different @ $p < .05$

one of the two most important by 45% of respondents, followed closely by "tree planting" (43%). "Youth programs" was selected only 15% of the time, followed by "lobbying politicians" (9%) and "fundraising" (8%). Despite the large sample of Census volunteers who had inventoried trees in New York City, "tree inventory" was selected by the fewest respondents (6%) in all groups. Deviations from these averages associated with volunteer status and cities were not very large.

Survey participants were asked to identify which of these seven tasks they have performed; they could also list others or be classified as "none" if no task was marked (Table 3). As might be expected, there were much higher percentages for tree volunteer organizations than potential volunteer groups in almost all categories, while a high percentage of Queens Botanical Garden and Morris Arboretum members fell into the "none" category. However, in these two organizations some potential volunteers had been involved in tree care (16% and 23%), tree planting (16% and 21%), education (10% and 21%), lobbying politicians (13% and 6%) and fundraising (17% and 9%).

For tree volunteers, tree care was the task performed by the highest number of Trees New York members (93%) and Treetenders (91%), and almost all of the Census volunteers had performed tree inventory (98%). The percentage of Treetenders (59%) who had planted trees was nearly twice that of Trees New York volunteers (32%), and three times that of Census volunteers (20%). Substantially more Treetenders than Trees

Table 3. Volunteer activities that respondents have performed, percentages in each organization.*

	Tree Volunteers			Potential Volunteers	
	Trees New York	Census	Treetenders	Queens Bot. Garden	Morris Arboretum
	n=114	n=158	n=155	n=70	n=123
Tree care	93.0	36.1	91.0	15.7	22.8
Education	33.3	22.8	43.2	10.0	21.1
Tree planting	31.6	19.6	58.7	15.7	21.1
Youth programs	10.5	7.0	27.1	4.3	12.2
Lobbying politicians	7.9	7.6	11.0	12.9	5.7
Fundraising	11.4	7.6	27.1	17.1	8.9
Tree inventory	28.1	98.1	46.5	7.1	13.0
Other	6.1	5.1	7.1	4.3	4.1
None with trees	4.4	0.6	1.9	57.1	61.0

* Respondents were asked to select all that apply; thus columns do not add to 100%.

New York or Census volunteers had performed education (47% versus 33% and 23%), youth programs (27% versus 11% and 7%), and fundraising (27% versus 11% and 8%). The findings suggest that Philadelphia respondents were more likely to have done a wider range of tasks than New Yorkers. However, one cannot infer a difference in the amount of volunteer time contributed among the groups.

From the same list of tasks, respondents were asked to choose activities they *would* perform that they haven't already, given the opportunity. These were added to the number of "have performed" responses, and percentages were calculated to create an index of willingness for each task (Table 4). Compared to the tasks performed in Table 3, percentages are dramatically higher for all

Garden (31%), and Morris Arboretum (56%) who are willing to plant trees is approximately twice those who have actually done so. Furthermore, only 19% of potential volunteers both had not performed any tree volunteer activity and would not. Thus, while 57% of respondents from Queens Botanical Garden and 61% from Morris Arboretum had not performed any task, two thirds of these same respondents said they would perform at least one.

Regardless of whether or not respondents have performed any of the listed tasks, they were asked which *one* might provide the most personal satisfaction (Table 5). Over-all, tree care and tree planting were chosen considerably more often than the other task categories. However, tree volunteers were more likely to select tree care than tree

Table 4. Volunteer activities respondents have performed or would perform, percentages in each organization.*

	Tree Volunteers			Potential Volunteers	
	Trees New York	Census	Treetenders	Queens Bot. Garden	Morris Arboretum
	n=114	n=157	n=155	n=70	n=123
Tree care	96.5	70.7	98.1	37.1	50.0
Education	59.6	61.1	65.2	24.3	46.3
Tree planting	66.6	65.0	84.5	31.4	54.5
Youth programs	36.0	40.1	51.0	21.4	27.6
Lobbying politicians	22.8	23.6	29.0	18.8	17.8
Fundraising	20.2	19.1	36.1	24.3	13.8
Tree inventory	67.5	99.4	80.6	35.7	47.2
Other	7.9	7.6	9.7	4.3	4.9
None with trees	1.0	0.0	0.0	18.6	18.7

* Respondents were asked to select all that apply; thus columns do not add to 100%.

organizations in most task categories, showing the potential for increased involvement by both active volunteers and potential volunteers. For example, the percentage of Census volunteers who might be willing to plant trees (65%) is more than three times those who have (20%), and the percentage of members from Trees New York (67%), Queens Botanical

Garden (31%), and Morris Arboretum (56%) who are willing to plant trees is approximately twice those who have actually done so. Furthermore, only 19% of potential volunteers both had not performed any tree volunteer activity and would not. Thus, while 57% of respondents from Queens Botanical Garden and 61% from Morris Arboretum had not performed any task, two thirds of these same respondents said they would perform at least one.

Regardless of whether or not respondents have performed any of the listed tasks, they were asked which *one* might provide the most personal satisfaction (Table 5). Over-all, tree care and tree planting were chosen considerably more often than the other task categories. However, tree volunteers were more likely to select tree care than tree planting, while potential volunteers expected tree planting to be more personally satisfying than tree care. Almost three times as many Trees New York volunteers chose tree care (61%) as chose tree planting (23%). There was no association between volunteer task and city.

When asked which volunteer activity they'd least like to perform,

respondents overwhelmingly chose either lobbying politicians or fundraising (Table 6). Respondents from Treetenders, Queens Botanical Garden, and Morris Arboretum found fundraising (35%, 25%, and 32%) somewhat less objectionable than lobbying politicians (50%, 40%, and 47%).

Responses to all task preference questions were tested across groups for association with respondent gender, marital status, race, age, education level and household income. More men (48%) than women (36%) said that tree planting was the first or second most important activity; men (41% versus 25%) were more likely to have performed tree planting and more willing (59% versus 39%) to plant trees with greater personal satisfaction, (39% versus 28%). On the other hand, more women (51%) than men (33%) chose education as the first or second most important activity, and 13% of women thought education would be most personally satisfying, compared to 8% of men.

A lower proportion of married/partnered respondents (39%) had volunteered for tree inventory than those in not married/partnered categories (55%). Fewer married/partnered respondents (40%) thought education was the first or second most important activity than non-married/partnered respondents (49%). Seventeen percent of married/partnered respondents had performed fundraising, while 11% of those in other categories had.

Non-white respondents (14%) were almost three times more likely

Table 5. Volunteer activities that would provide the greatest personal satisfaction to members of individual groups, percentages by individual organizations.

	Tree Volunteers			Potential Volunteers	
	Trees New York n=114	Census n=155	Treetenders n=153	Queens Bot. Garden n=70	Morris Arboretum n=121
Tree care	60.5	38.7	45.1	20.0	24.0
Education	7.9	12.9	7.8	14.1	12.4
Tree planting	22.8	33.5	35.9	34.3	36.4
Youth programs	4.4	3.2	6.5	10.0	7.4
Lobbying politicians	0.0	0.6	0.7	0.0	1.7
Fundraising	0.9	1.3	0.0	0.0	0.0
Tree inventory	1.8	5.8	3.3	10.0	9.9
Other	0.9	1.9	0.7	1.4	0.0
None	0.9	1.9	0.0	8.6	8.3
	100%	100%	100%	100%	100%

than white respondents (5%) to think tree inventory was first or second most important. Also, twice the proportion of non-white respondents (20%) as white respondents (10%) said that education would provide the most satisfaction (although there were only 51 non-white respondents for the question).

There were significant relationships between willingness to perform certain volunteer tree tasks and age; tests controlled for the younger age of tree volunteers. All respondents willing to perform tree planting were younger on average than unwilling respondents. Tree volunteers willing to perform youth programs were younger on average than those who would not. Potential volunteers willing to perform tree care and education were younger than those who were not willing.

Table 6. Volunteer activities that respondents would least like to perform, percentages by individual organizations.

	Tree Volunteers			Potential Volunteers	
	Trees New York n=112	Census n=154	Treetenders n=152	Queens Bot. Garden n=65	Morris Arboretum n=116
Tree care	0.0	1.9	0.0	3.1	0.9
Education	0.0	1.3	1.3	1.5	1.7
Tree planting	4.5	6.5	1.3	4.6	5.2
Youth programs	1.8	3.9	6.6	7.7	3.4
Lobbying politicians	39.3	41.6	50.0	40.0	46.6
Fundraising	44.6	40.3	34.9	24.6	31.9
Tree inventory	6.3	1.3	4.6	6.2	6.0
Other	0.9	0.0	0.7	0.0	0.0
None	2.7	3.2	0.7	12.3	4.3
	100%	100%	100%	100%	100%

Table 7. Actual and desired levels of participation by volunteers in planning and decision-making of their organization, percentages within organizations.

	Trees New York		Census		Treetenders	
	Actual n=108	Desired n=107	Actual n=145	Desired n=144	Actual n=151	Desired n=148
Very often	10.2	8.4	15.9	16.0	27.2	18.9
Often	2.8	15.9	5.5	21.5	18.5	33.1
Sometimes	17.6	49.5	8.3	43.8	27.2	43.2
Rarely	13.9	11.2	17.9	11.1	15.2	3.4
Never	55.6	15.0	52.4	7.6	11.9	1.4
	100%	100%	100%	100%	100%	100%

Respondents who have performed tree inventory, and also those more willing to inventory, had lower household income. Respondents who have performed fundraising had higher household incomes than those who had not, as did those willing to perform fundraising. Respondents with higher education levels also showed more willingness to engage in fundraising, as well as in education.

Experiences of Tree Volunteers. The length of membership of tree volunteers with their organization reflected the age of that organization. The Street Tree Census volunteers project had lasted only one season. Because the Treetender course has only been offered since 1993, most respondents reported they have been members for 1 year or less (52%) or for 2 to 4 years (47%). In the much older Trees New York, the majority of "citizen pruners" have been members for 1 year or less (20%) or 2 to 4 years (44%), but there were also respondents who indicated 5 to 7 years (15%), 8 to 10 years (13%), and more than 10 years (7.5%).

The way in which tree volunteers learned about their organization varied; responses were not mutually exclusive. Street Tree Census volunteers relied heavily on the media: 41% first learned about the Census through the newspaper, 16% via radio, and 14% from television; also, 12% received a letter from the Parks Commissioner urging them to volunteer. In comparison, most Treetenders learned about their group through word of mouth (51%) or through participation in another "green" organization (27%); 12% heard about Treetenders from newspapers, and 24% responded "other." Citizen pruners learned about

Trees New York from a wide range of sources, including newspapers (36%), word of mouth (19%), botanical garden course publications (16%), "other" (16%), don't remember (13%), and via another "green" group (11%).

There was a striking difference between Treetenders and the two New York City volunteer groups in the percentage who were personally asked to join their organization. The 61% of Treetenders who were asked to join corresponds to the high number who learned about their organization through word of mouth, compared to 20% from Trees New York and 13% of Census volunteers. For both Treetenders and Trees New York, "joining" essentially means enrolling in their training course. There was no relationship between being asked to join and age, gender, race, employment status, education level, or household income level. However, married/partnered volunteers (38%) were personally asked to join their organization more often than non-married/partnered volunteers (26%). Almost half of the volunteers who were asked to join (46%) said they would not have joined if they hadn't been asked.

When asked how often they have participated in the planning and decision-making of their volunteer organization ("actual participation"), and how often they *want* to participate ("desired participation," Table 7), there were significant differences according to organization. Treetenders had a much higher average participation in planning and decision-making than members of the other two volunteer groups and more of a desire to participate. For example, 46% of Treetenders reported they participated either very often or often, compared to 13% from Trees New York and 21% from the Street Tree Census. Only 12% of Treetenders never participate, while 56% from Trees New York and 52% from the Census never participate. Non-white respondents reported higher involvement in planning and decision-making than white respondents. Also, volunteers

who were married/partnered were more often involved than volunteers in other categories. Most importantly, Table 7 demonstrates that below the "very often" category, most tree volunteers wanted to be more involved in planning and decision-making than they had been.

Volunteers from Trees New York and Treetenders were asked if they would prefer to do more, the same amount of work, or less than they are currently doing. Among Trees New York respondents 50% said they would prefer more work, 47% said the same amount, and 3% said less work. Treetenders responses showed that 25% preferred more work, 61% the same amount, and 15% less work.

Approximately half of Treetenders and Census volunteers reported that they have received recognition for their volunteer work, compared to 37% of Trees New York volunteers. Across groups, there was no association between receiving recognition and gender, race, education level, or household income. In an open-ended follow-up question, tree volunteers reported the form of recognition they received, which included thanks from neighbors, colleagues or their organization, media acknowledgments, letters, awards, and certificates.

As a whole, tree volunteers gave relatively little importance to receiving recognition: 58% said that recognition was not important, followed by somewhat important (28%), important (11%), and very important (4%). The differences among survey organizations were not significant. However, non-white respondents gave greater importance to recognition than white respondents. There was also a weak indication that respondents with lower household income tended to give greater importance to recognition. There were no relationships between the importance of recognition and gender, marital status, employment status, age, or education level.

Both tree volunteers and potential volunteers were asked if they would rather volunteer for projects with specific completion dates, or for ongoing activities. Members of Trees New York and Treetenders tended to favor projects with specific completion dates (57% and 57%) over ongoing activities (42% and 40%), while the other three

groups were about evenly divided between the categories.

Respondents who wanted specific project completion dates were asked if their preferred project length is a day, week, month, year, or several years. Potential volunteers preferred shorter lengths of time on average than tree volunteers. Almost half of Queens Botanical Garden and Morris Arboretum members chose a day (48% each), followed by a month (22% and 23%), a year (13% and 16%), a week (13% and 11%), and several years (4% and 2%). Similar distributions were found for Trees New York and Treetenders. However, the highest number of Census volunteers chose a month (47%) as their preferred project length. Across groups, the one week category seems to be equally unpopular, as only 9 to 13% selected it. Less than 11% preferred several years. Furthermore, employed respondents preferred volunteer projects with shorter time frames than respondents in other employment status categories, and respondents with fixed schedules (both full and part-time) preferred shorter time frames than respondents with flexible schedules.

Other Volunteer Activities. Fifty-eight percent of tree volunteers reported that they have also done other sorts of volunteer work. They were asked to list one or two volunteer organizations in which they have been most active, and these were grouped into general categories. Twelve percent of all tree volunteers were also involved in neighborhood associations, followed by educational volunteer activities (10%), gardening/horticulture (8%), environmental (7%), health (6%), church (6%), arts (5%), political (4%), and recreational (3%). Twenty-eight percent of respondents volunteered for activities other than these.

Potential volunteers were also asked about their volunteer activities. Seventy-nine percent reported that they have done some kind of volunteer work in the past, and 67% of these said they last volunteered within the past year. Of all potential volunteer respondents, twenty percent volunteered for gardening/horticultural activities, followed by church (18%), educational (11%), environmental (11%), health (11%), neighborhood associations

(7%), arts (5%), political (3%), and recreational activities (3%). Twenty-one percent of respondents volunteered for other activities.

Discussion

Tree volunteers in this survey of organized groups were most likely to be white, middle-aged, well-educated, and financially middle-class. The high percentage of non-Hispanic white volunteers (90%) is not representative of the general populations of New York City and Philadelphia: 56% of New York residents and 75% of Philadelphia residents are non-Hispanic white (35). There were somewhat more female than male volunteers. More volunteers had flexible work schedules than the potential volunteers, and more were employed. Most volunteers had lived in both their current neighborhood and city area for a considerable length of time, although there was a wide range of residence lengths.

This particular profile is not representative of all tree volunteers. The respondents surveyed were primarily urban, and are further defined by their willingness to complete a training course on tree care or tree inventory. To gather information from a wider range of tree volunteers, one would need to contact smaller groups such as block/neighborhood associations or other ad hoc groups that are not easily accessed through a mail survey.

The literature stresses that targeted recruitment of volunteers, particularly asking people directly, is more effective than a general appeal (6, 15, 20, 22, 24, 28, 30, 38). A Gallup Organization survey, *Giving and Volunteering in the United States* (12), found that people were more than three times as likely to volunteer when asked than when not asked. In the current survey, less than a fifth of Trees New York and Census volunteers claimed to have been asked to volunteer, whereas 61% of Treetenders said they were asked. The difference can be explained largely by different types of recruitment efforts and organizational structure. The Treetenders program targets neighborhood associations and other pre-existing groups, and representatives of each group often enroll in the training course together. The asking may have occurred within the groups when the idea was presented to members, which also explains why

many Treetenders first heard of their organization through word of mouth. On the other hand, the large numbers of people from the other organizations who were not asked to volunteer demonstrate that the use of the media and other recruitment techniques were also effective. This suggests that many of the tree volunteers were self-motivated to become involved.

Almost half of tree volunteers who were personally asked to volunteer said they would not have volunteered if they had not been asked. This indicates the importance of personal contact for recruiting those people not already self-motivated to join. Furthermore, the Gallup survey (12) found that the people least likely to be asked were blacks, Hispanics, persons over 65 years of age, persons 18-24 years of age, and those with household incomes below \$20,000. There is low representation of these groups within the surveyed tree volunteer organizations, showing a need for increased efforts to reach such people if diversity is a goal. Specific techniques for recruiting black and Hispanic volunteers have been summarized by Chambré (7).

Neighborhood improvement was regarded as the most important reason to volunteer. Reflecting the willingness to invest in the community and improve one's surroundings, the reason is distinguished from the other two concepts by a concern for the broader good rather than the self. Furthermore, this reason for volunteering is most affiliated with the primary mission of urban forestry, which is to improve the livability of our communities. One respondent wrote, "What gets us motivated to contribute our time and money is the knowledge that our help will benefit our own neighborhood. So, my suggestion is to make sure any program you devise be very localized and specific to a neighborhood."

Desire for education was also high in importance, and was higher among tree volunteers than potential volunteers. The literature also recommends that volunteer programs provide a healthy learning environment because training and education can be an incentive (6, 11, 15, 19, 22, 28, 31, 32 38). The high desire for education is supported by many comments appended by respondents expressing not only personal

enjoyment of their learning experiences, but the great importance of educating the community at large about the benefits of city trees.

Social interaction was least important as a reason to volunteer. On average, tree volunteers and potential volunteers alike gave it the same moderate level of importance, while many gave it little or no importance. Treetenders rated social interaction higher than the other groups, which may be a reflection of the involvement of neighborhood groups within the larger organization. Social interaction and fellowship have been cited as important motivations for volunteering by several authors (6, 8, 11, 19, 22, 38). In contrast this survey found that the social benefits of tree volunteerism were peripheral, and not critical motivators for recruitment. Social benefits may become an unexpected bonus after becoming involved, which could influence enjoyment and promote further retention. Wrote one respondent, "Answering question 20 left me feeling as though I'm a misanthrope. I think that considerable satisfaction is gained in working with people, getting to know one's neighbor, and meeting other people, but these factors wouldn't be my main reason for doing *any* volunteer work."

The high value given *Volunteers Are Useful* by potential volunteers is pertinent to recruitment efforts. Taken in conjunction with the fact that 79% of potential volunteers had volunteered before in some capacity (67% of these volunteered in the past year), this finding demonstrates that they believe volunteering can make a difference in their community, and they are generally willing to become volunteers themselves. This suggests targeted groups like members of arboreta and botanical gardens would be responsive to recruitment efforts.

All survey groups generally agreed their urban forest was in rather poor condition, indicated by the declining health and inadequate number of city trees. Potential volunteers need little convincing that their city needs more trees, and that care and management of existing trees is an urgent need. This is not an obstacle to be overcome for volunteer recruitment. Many comments by respondents described a perception of city negligence toward trees or poor quality work.

The tasks considered most important and personally satisfying to respondents were tree care and tree planting, both of which are physical, hands-on activities. Tree care was considered the most important activity across all groups, and was the most performed and most personally satisfying among tree volunteers. The reason could be that with proper training, care of young trees is easy, requires little equipment and planning, and results are easily seen. Trees New York and Treetenders are in large part geared toward this activity. Tree planting was also considered very important, and potential volunteers thought it would be the most personally satisfying. The work also appeals more to men and to younger respondents, perhaps due to its very physical nature. Tree planting opportunities are more limited, particularly in New York City, due to red tape, specification requirements for large trees, high costs, and difficult site preparations.

Education was given high importance by all respondents, whether or not they had been educated for volunteer tasks. Unexpectedly, tree volunteers said it was the first or second most important activity more often than tree planting. Education was considered important or personally satisfying more often among women and non-white respondents. A number of respondents commented that education must go hand in hand with other activities such as tree care or youth programs. A substantial number of respondents were willing to perform education as a volunteer activity, even though it was rarely chosen as the task that provides the greatest personal satisfaction. It may be seen as the means to a higher goal, such as tree care or planting.

Lobbying politicians and fundraising proved to be widely unpopular. People with higher incomes, and in the case of fundraising, higher education levels, were somewhat more receptive to these activities.

Respondents showed great willingness to become involved in a wider variety of tasks than they have performed in the past. Working on a tree inventory, for example, would provide greatest satisfaction to only 2 to 6% of tree volunteers, and just 4 to 8% regard it as very important; nevertheless, 68% to 99% are willing to perform

tree inventory. Also, while more than half of potential volunteers had never performed any tree related activity, only 19% said they never would. This implies that substantial opportunity exists for increased volunteer involvement, as well as for the implementation of new and different types of volunteer projects.

The strong desire among tree volunteers to participate more in the planning and decision-making of their volunteer projects corresponds with the conclusions of Knoke (18), who found that responsibility and the ability to influence organizational activities increases volunteer membership support. Similar ideas are conveyed in the urban forestry literature (13, 19, 26). The exception is that few respondents wanted to increase their involvement to the "very often" category, indicating there are many more followers than leaders. One respondent wrote, "In a neighborhood like mine, the Lower East Side of Manhattan, it seems that there are (sic) a core group of people who do things and a majority who find it difficult to do anything. This leaves the 'doers' in a role of 'take-over artists' and often leaves them burnt out from community involvement."

The proportion of tree volunteers who perceive they've been recognized for their work in some way ranged from over a third to half of respondents per organization. On the whole, however, tree volunteers said that recognition was not important to them. While this response must be taken at face value, to respond otherwise might seem to run counter to the commonly held image of volunteerism as an altruistic endeavor. The volunteer literature stresses the importance of recognition in maintaining volunteer support. Such widespread agreement among experienced volunteer coordinators and professionals suggests that recognizing volunteer efforts enhances volunteer support and commitment despite the low importance volunteers themselves ascribe to it. One volunteer wrote, "I understand people need to be appreciated, but, personally, the planting of a tree is my trophy."

Many authors have explained the value of goal-setting for volunteer projects; experience has shown that volunteer motivation and retention is enhanced when small, clear steps are planned that

lead to the group's goal (15, 19, 25, 28, 30, 38). Results from this survey partially substantiate this. Members of the Census, Queens Botanical Garden, and the Morris Arboretum were about evenly divided on preference for volunteer projects with specific completion dates or ongoing activities, while members of Trees New York and Treetenders leaned toward having specific completion dates for projects. A number of Census volunteers commented that their project took longer than was promised, which expresses the importance for some volunteers of knowing when a commitment will end and how much work is involved. For those respondents who prefer completion dates, the highest percentage thought a day commitment was most preferable, and a month was also satisfactory to many. Potential volunteers tended to choose shorter project lengths than tree volunteers, suggesting that coordinators might be more successful in attracting new volunteers by initially proposing short-term, day projects. However, one tree volunteer said, "Planting satisfies the goal-oriented, but to truly make a difference, taking responsibility for the life of the tree is what is needed. We must stop teaching our young people that a quick fix is going to save our neighborhoods - it is the constant care that is going to give our neighborhoods the ability to grow and flourish."

Conclusions

Respondents in this survey, who were volunteers organized to perform tree care or inventory tasks, were predominately white, middle aged, well educated, and financially middle class.

- Many of the current volunteers were self-motivated in seeking volunteer involvement; i.e., they volunteered without being asked. However, personally asking potential volunteers is an effective recruitment technique for expanding the pool of volunteers beyond this self-selected group. Personal contact would not only attract more volunteers from the demographic group profiled above, but from other groups which are more difficult to reach.

- Improving one's neighborhood was the most important reason for volunteering, and the desire for education was also important. The desire for social interaction was only moderately important.

Opportunities for education and social interaction can be especially useful for recruiting minorities and those with lower incomes.

- Botanical gardens, arboreta, and other organizations that enjoy plants are good sources of tree volunteers. Both tree volunteers and potential volunteers strongly agreed that volunteers are useful and needed to improve their city's urban forest. Four-fifths of potential volunteers who belong to botanical gardens have volunteered before in some way, indicating a general willingness for voluntary action.

- All survey organizations generally agreed their urban forest was in rather poor condition.

- Tree care was considered the most important volunteer task by members of all organizations.

- Tree volunteers thought tree care would provide the greatest personal satisfaction, and indicated that education was even slightly more important than planting trees.

- Potential volunteers thought tree planting was the second most important task after tree care, and they felt tree planting would provide the greatest personal satisfaction.

- There was great willingness among both tree volunteers and potential volunteers to perform a wider range of tasks than they have performed already, suggesting strong potential for increased involvement.

- By a wide margin, lobbying politicians and fundraising were activities that respondents from all organizations would least like to do.

- There is a strong desire among tree volunteers to increase their level of participation in the planning and decision-making of their volunteer projects, but few wanted to take responsibility for leadership at the highest level.

- Less than half of tree volunteers perceive that they have been recognized for their volunteer work in some way, but contrary to conventional wisdom, recognition was mostly viewed as unimportant.

- In regard to participating in projects with specific completion dates or participating in ongoing activities, respondents were about evenly split. Among those who preferred completion

dates, one-day projects were favored over longer projects, particularly among potential volunteers. One-month projects were also acceptable to many.

Literature Cited

1. Agresti, A. and B. Finlay. 1986. *Statistical Methods for the Social Sciences*. San Francisco, CA: Dellen Publishing Company. 556 p.
2. Ames, R.G. 1980. *The sociology of urban tree planting*. *J. Arboric.* 6(5):120-123.
3. Ball, J. 1986. *Urban forestry and volunteer management*. *J. Arboric.* 12(7):182-184.
4. Bloniarz, D.V. and H.D.P. Ryan III. 1996. The use of volunteer initiatives in conducting urban forest resource inventories. *J. Arboric.* 22(2):75-82.
5. Bone, P. 1983. Master gardener and TREES - the volunteer in urban forestry. Proc. 4th Urban Forestry Conf., Cincinnati, Oct. 1983. Washington DC: The Am. Forestry Assoc. p. 287-291.
6. Brudney, J.L. 1990. *Fostering Volunteer Programs in the Public Sector: Planning, Initiating, and Managing Voluntary Activities*. San Francisco: Jossey-Bass Publishers. 243 p.
7. Chambré, S.M. 1982. *Recruiting black and Hispanic volunteers: a qualitative study of organizations' experiences*. *J. Volunteer Admin.* Fall 1982:3-9.
8. Cole, D. W. 1979. *Oakland Urban Forestry Experiment: A Cooperative Approach*. *J. For.* 77: 417-419.
9. Dillman, D.A. 1978. *Mail and Telephone Surveys: The Total Design Method*. New York: John Wiley & Sons. 325 p.
10. Dwyer, J.F., H.W. Schroeder, and P.H. Gobster. 1991. *The significance of urban trees and forests: toward a deeper understanding of values*. *J. Arboric.* 17(10):276-284.
11. Ellis, S.J. 1986. *From the Top Down: The Executive Role in Volunteer Program Success*. Philadelphia: Energize Associates. 185 p.
12. Gallup Organization. 1992. *Giving and Volunteering in the United States: Findings from a National Survey*. Washington, D.C.: Independent Sector.
13. Greer, J.D. 1984. *How to run a volunteer program*. *J. For.* 82:660-662.
14. Grey, G. W. 1993. *A Handbook for Tree Board Members*. Nebraska City, NE: The National Arbor Day Foundation. 40 p. + appendix.
15. Ilesley, P.J. 1990. *Enhancing the Volunteer Experience: New Insights on Strengthening Volunteer Participation, Learning, and Commitment*. San Francisco: Jossey-Bass Publishers. 170 p.

16. Illsley, P.J. and J.A. Niemi. 1981. Recruiting and Training Volunteers. New York: McGraw-Hill. 150 p.
 17. Johnson, G.R. 1995. Tree care advisor: A voluntary stewardship program. *J. Arboric.* 21(1):25-32.
 18. Knoke, D. 1981. *Commitment and detachment in voluntary organizations.* *Am. Sociol. Rev.* 46(Apr.): 141-158.
 19. Lipkis, A. and K. Lipkis. 1990a. The Simple Act of Planting a Tree: A Citizen Forester's Guide to Healing Your Neighborhood, Your City, and Your World. Los Angeles: Jeremy P. Tarcher, Inc. 236 p.
 20. Lipkis, A. and K. Lipkis. 1990b. Taking It to the Streets: Inspiring Public Action. Are Forests the Answer? Proc. 1990 Soc. Am. Foresters National Convention, Washington, D.C. Bethesda, MD: SAF. p. 520-528.
 21. Makra, E.M. and J.W. Andreson. 1990. *Neighborhoods: volunteer community forestry in Chicago.* *Arboric. J.* 14(2):117-127.
 22. McCabe, S. 1994. *Volunteers in urban forestry.* *The Public Garden* 9(1):32-35.
 23. Moll, G. and S. Ebenreck, eds. 1989. *Shading Our Cities: A Resource Guide For Urban and Community Forests.* Washington D.C.: Island Press. 333 p.
 24. Moll, G. and S. Young. 1992. Eight Steps to Organizing a Community. *Growing Greener Cities: A Tree-Planting Handbook.* Los Angeles, CA: Living Planet Press. p. 94-104.
 25. Monear, J. 1994. Volunteer Pro's and Con's: The Seven C's of Success. Proc. 6th National Urban Forestry Conf., Minneapolis, MN, September 14-18, 1993. Washington D.C.: *Am. Forests.* p. 132-134.
 26. Moronne, D.D. 1978. Urban Forestry: Agency Guidelines for Public Involvement. Proc. National Urban Forestry Conference, Washington, DC, Nov. 1978. Washington, D.C.: American Forestry Association. p. 127-133.
 27. National Arbor Day Foundation. 1995. *How to Work with Volunteers - Effectively.* Bulletin No. 36. Nebraska City, NE: Tree City USA. 8 p.
 28. Naylor, H.H. 1967. *Volunteers Today - Finding, Training, and Working with Them.* New York: Association Press. 192 p.
 29. Norusis/SPSS Inc. 1990. *SPSS Introductory Statistics Student Guide.* Chicago, IL: SPSS Inc. 420 p.
 30. Phillips, L.E., Jr., ASLA. 1993. *Public Relations Programs: Volunteers.* *Urban Trees: A Guide for Selection, Maintenance, and Master Planning.* U.S.A.: McGraw-Hill, Inc. p. 153-159.
 31. Probart, S. 1994. Effective Volunteerism. Proc. 6th National Urban Forest Conf., Minneapolis, MN, September 14-18, 1993. Washington D.C.: *American Forests.* p. 49-50.
 32. Schindler-Rainman, E. 1988. Trends and Changes Affecting the Volunteer World. *Motivating People to Volunteer Their Services. Recruitment, Orientation, and Retention. Training Plans. Administration of Volunteer Programs.* p. 16.3-20.9. In *The Non-Profit Organization Handbook (2nd ed.)*, T.D. Connor, (Ed.) New York: McGraw-Hill.
 33. Sommer, R., F. Learey, J. Summit, and M. Tirrel. 1994. *The social benefits of resident involvement in tree planting.* *J. Arboric.* 20(3):170-175.
 34. Still, D. 1996. *Urban Forestry Volunteers: Their Task Preferences, Experiences, and reasons for Volunteering.* M.S. Thesis in Forest Resources. University Park: The Penn State Univ. 105 p.
 35. US Department of Commerce, Bureau of the Census. 1993. 1990 Census of Population and Housing: Population and Housing Characteristics for Census Tracts and Block Numbering Areas. Washington, D.C.: Government Printing Office.
 36. Westphal, L. 1993. Why Trees? Urban Forestry Volunteers Values and Motivations. p. 19-23. In P.H. Gobster, (Ed.) *Managing Urban and High-Use Recreation Settings.* 4th North Am. Symp. Society and Resource Management, May 17-20, 1992, University of Wisconsin, Madison, WI. St. Paul, MN: North Central Forest Experiment Station.
 37. Westphal, L and G. Childs. 1994. *Overcoming obstacles: creating volunteer partnerships.* *J. For.* 92(10):28-29, 31-32.
 38. Wilson, M. 1976. *The Effective Management of Volunteer Programs.* Boulder, CO: Volunteer Management Associates. 197 p.
- ¹The study was supported by USDA Forest Service, NA State & Private Forestry, the Pennsylvania Urban and Community Forestry Council, and Penn State University. The authors thank the five organizations that participated, which are named in the Methods section.

School of Forest Resources
Penn State University
University Park, PA 16802

Résumé. Un sondage par voie postale a été effectué auprès de membres de trois organismes bénévoles – un lié à un jardin botanique dans la région de New York, un à un arboretum aussi dans la région de New York et un autre dans la région de Philadelphie – pour déterminer pourquoi les gens se proposent comme volontaire et leurs tâches favorites. Les membres de ces trois groupes de bénévoles avaient complété récemment un cours de formation sur l'entretien des arbres ou l'inventaire. Globalement, 1038 personnes ont été sélectionnées et 63% d'entre elles ont répondu. Le principal motif incitatif des gens au travail volontaire était l'amélioration de son voisinage, suivi par des motivations d'ordre éducatif. L'interaction sociale n'entraîne que modérément dans les facteurs d'importance. Les répondants de toutes les organisations croient que l'entretien et les soins aux arbres sont l'activité de foresterie urbaine la plus importante. L'éducation est perçue comme une tâche hautement importante pour gagner le support public. Les répondants de toutes les organisations croient que leur forêt urbaine est en relative mauvaise condition et que des volontaires sont nécessaires pour améliorer leurs arbres de ville. Le contact personnel avec des volontaires potentiels constitue une technique de recrutement efficace pour accroître le nombre de volontaires au-delà de ces groupes restreints et sélectifs.

Zusammenfassung. Bei einer Postumfrage wurden Personen aus den Mitgliederlisten von drei Freiwilligenorganisationen, eines botanischen Gartens und je eines Arboretums in der Gegend von New York bzw. Philadelphia angeschrieben, um herauszubekommen, warum Leute freiwillig arbeiten und welches ihre bevorzugten Aufgaben sind. Die Mitglieder der drei Freiwilligenorganisationen hatten kürzlich einen Trainingskurs in Baumpflege bzw. Bauminventur abgeschlossen. Insgesamt wurden 1.038 Leute angeschrieben und 63 % antworteten. Der Hauptgrund für freiwillige Dienste war die Verbesserung der Nachbarschaft, gefolgt von dem Wunsch nach Ausbildung. Die soziale Interaktion war nur mittelmäßig von Bedeutung. Die Mitglieder aller Organisationen hielten die Baumpflege für die wichtigste Aufgabe im Bereich der Naherholungswälder. Ausbildung wurde als eine sehr wichtige Aufgabe verstanden, um öffentliche Unterstützung zu erhalten. Die Mitglieder aller Organisationen hatten den Eindruck, daß ihr Naherholungsgebiet in einem ziemlich erbärmlichen Zustand ist, und daß hier Freiwillige gebraucht werden, um die Bäume zu pflegen. Der persönliche Kontakt mit potentiellen Freiwilligen wird genutzt, um neue Mitglieder zu werben und dadurch den Pool an Mitarbeitern zu vergrößern.