

Trees in Your Community

2009



Results from a 2008 Questionnaire for the Urban Forestry Program,
Wisconsin Department of Natural Resources, Division of Forestry



College
of Natural Resources



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Introduction

Wisconsin's Urban and Community Forests are valuable resources that support healthy communities through their social, ecological, and economic contributions. Urban and Community Forestry (U&CF) programs exist at local, state, and federal levels within the state. These programs are used to develop and implement urban forestry activities with the ideal outcome of supporting sustainable tree populations. Ideally all communities in Wisconsin would have healthy and vibrant urban forest ecosystems and the ability to foster urban tree populations for future generations. This is not the case for a variety of reasons relating to the ability or capacity of a community to do so.

The Wisconsin Department of Natural Resources (WIDNR) Division of Forestry U&CF program has a mission *To Encourage and Enable Sound Management of Wisconsin's Urban Forest Ecosystems* using five basic forms of assistance (Table 1). Wisconsin Administrative Code and Legislative Authority give enabling authorization to provide local assistance. For example, Wisconsin Statutes 28.01, 28.07, and 26.30 and Administrative Code 1.211 support and offer rationale for cooperative forestry assistance. Likewise, State Statute 23.097 and Administrative Codes NR 47.50 – NR 47.58 (Urban and Community Forestry Grant Program) impart guidance for financial assistance through the U&CF grant program. Wisconsin statutes 27.09 and 86.03 provide advice and support for local U&CF programs. Knowing the outcomes of these statutes and codes is important to determine if the legislative intent is occurring and to make modifications when needed. Further, determining what local communities are doing to grow the urban forest is important with developing statewide U&CF assistance within state government.

Table 1. The mission and forms of assistance of the Wisconsin Department of Natural Resources Urban and Community Forestry Program.

The mission of the DNR Forestry's urban forestry program is "To Encourage and Enable Sound Management of Wisconsin's Urban Forest Ecosystems." DNR urban forestry staff assist community officials, green industry professionals, businesses, schools, non-profit organizations, the general public and others who impact the resource to work together to expand, improve and manage the urban forest. Assistance takes five basic forms:

Resource Assessment - regularly evaluate Wisconsin's urban forests and community urban forestry programs and use the information to identify management goals and assistance needs.

Technical assistance - help communities develop management plans, inventories, ordinances, plant health care and training plans.

Education and Training - develop, facilitate and coordinate programs and materials for forestry professionals, elected officials, planners, developers, school children and volunteers.

Resource Development - administer state and federal cost sharing programs and assist in finding and developing alternate sources of funding, staff and support for community programs.

Public awareness - develop awareness and support of the value of urban forests and their need for management through the media, recognition programs, celebrations and events.

The WIDNR U&CF program periodically conducts resource assessments of local U&CF programs. These assessments tell us the current state of local U&CF programs and if they have improved, stayed the same, or regressed from previous known levels in 1991 and 1999. Past results from these studies have led to developing and modifying the various forms of technical and financial assistance the DNR U&CF program provides.

This report documents results from the most recent 2008 assessment of local U&CF programs in Wisconsin. It presents quantitative data on a wide range of topics including community budgets, tree management approaches, the use of volunteers and contractors, inventories, as well as evaluative information regarding the tools with which the Urban Forestry Program promotes development of local U&CF programs. The study also gathered feedback from communities with their participation in the urban forestry grant program, urban forestry services, and needs.

Study Design

The study was created jointly between the University of Wisconsin – Stevens Point (UWSP) and the DNR’s U&CF program leaders. Funding for the study came from the WIDNR U&CF program, the McIntire-Stennis program, and the University of Wisconsin-Stevens Point. A questionnaire was developed in conjunction with DNR U&CF staff to gather required data. Prior to delivery of the questionnaire, approval for a human subjects study was sought and granted by the Institutional Review Board at UWSP to comply with federal regulations. The instrument design of the questionnaire considered programmatic needs for DNR U&CF staff and metrics of communities to quantify their various approaches to urban forest management and attributes specific to their community. This work further was used to streamline the collection of data necessary for regional coordinators to carry forward their community assistance work.

The results presented in this report are drawn from a 24-page questionnaire mailed to 686 locations in Wisconsin (Appendix A). Targeted locations include 183 cities, 92 towns, 403 villages, 7 tribal communities, and 1 military installation (Table 2). State and regional DNR U&CF program coordinators developed the target list of locations to contact.

Table 2. Response rate for the questionnaire by geographic location.

Location	Returned ¹	Not returned ¹	Total	Percent Return
City	123	60	183	67.2
Village	253	150	403	62.8
Town	59	33	92	64.1
Tribal	1	6	7	14.3
Military	1	0	1	100.0
Unknown	15			
Totals	452	249	686	65.9

¹ A total 15 responses had incomplete community information to track by location, thus the not returned total by city, village, town, and tribal is slightly lower than reported

A total six contacts were made using methods suggested by Dillman (2007). This approach resulted in an acceptable sample response rate of 66% from the 452 responding locations (Table 2). This compares well to the 1999 study of 412 (69%) responding communities used in that study analysis. A preliminary 1991 study had a 33% response rate. A close percentage of cities, villages, and towns responded. However, a trend existed for smaller communities that responded at a lower rate than larger communities (Table 3).

Table 3. Response rate for the questionnaire stratified by population.

Population Class	Received			
	No	Yes	Total ¹	Percent Return
0 to 499	51	77	131	60.2
500 to 999	40	74	115	64.9
1000 to 4999	103	171	279	62.4
5000 to 9999	21	61	84	74.4
10,000 to 49,999	17	58	78	77.3
>50,000	3	10	14	76.9
Total	250	451	686	65.7

Results

Results for the study are reported by each section of the questionnaire. These sections were designed by theme with each question presented within a section consistent with the theme. For example, section one was used to describe attributes of a location such as community size, areas under management, and the community structure for personnel associated with the local U&CF program. Key outcomes from the questionnaire are presented in each section. Not all findings from the questionnaire are reported. Appendix A provides a more complete description of findings. A cross-tabulation analysis that segregated a question by population class was done for some questions to determine if differences by population existed.

Section I – Your Community and Staff

Section one was designed to capture background information of a community and U&CF program demographics. Questions were created to ascertain community population, distance and size of streets and greenspace, level of management applied to an area, and if someone in a community oversees the care of municipal trees. Which municipal departments provided responsibility, the primary person responsible for tree care, and their level of training was found. We determined the number of people involved with tree management in permanent, seasonal, volunteer, private contractor, and other positions. Finally, respondents indicated how much understanding and embracement their community leaders gave for sound urban forest management. Key findings include:

- The population of responding communities ranged from 76 to 596,974 with an average population of 7772.

- On average a community manages 50 miles of streets, 146 acres of parks, 175 acres of natural areas, and 35 acres of other grounds such as cemeteries and buildings and grounds.
- Park trees are more likely to have greater management followed by street trees (Figure 1-1).
- Of the 72% of communities statewide that have someone to oversee the care of trees, 100% of communities with 10,000 or more people had a staff member and the trend increases with population with only 40% of communities less than 500 people having such a staff member. (Figure 1-2).
- A public works department (56%) is most likely to have primary responsibility to manage public trees followed by parks and recreation (15%), and forestry (10%) departments.
- Respondents could respond to all applicable training levels. Approximately 47% of staff have no specific training level and 50% attend tree care/management workshops. Additional staff training includes passing the ISA certified arborist program (14%) and/or have advanced training in a 2-year (4%), 4-year (16%), or graduate (1%) program (Figure 1-3).
- Community leaders have a moderate level of understanding and embracement for U&CF management and value with a 5.42 index score on a 1 (very poor) to 10 (excellent) scale (Figure 1-4). Leaders from larger communities are more likely to have higher score.

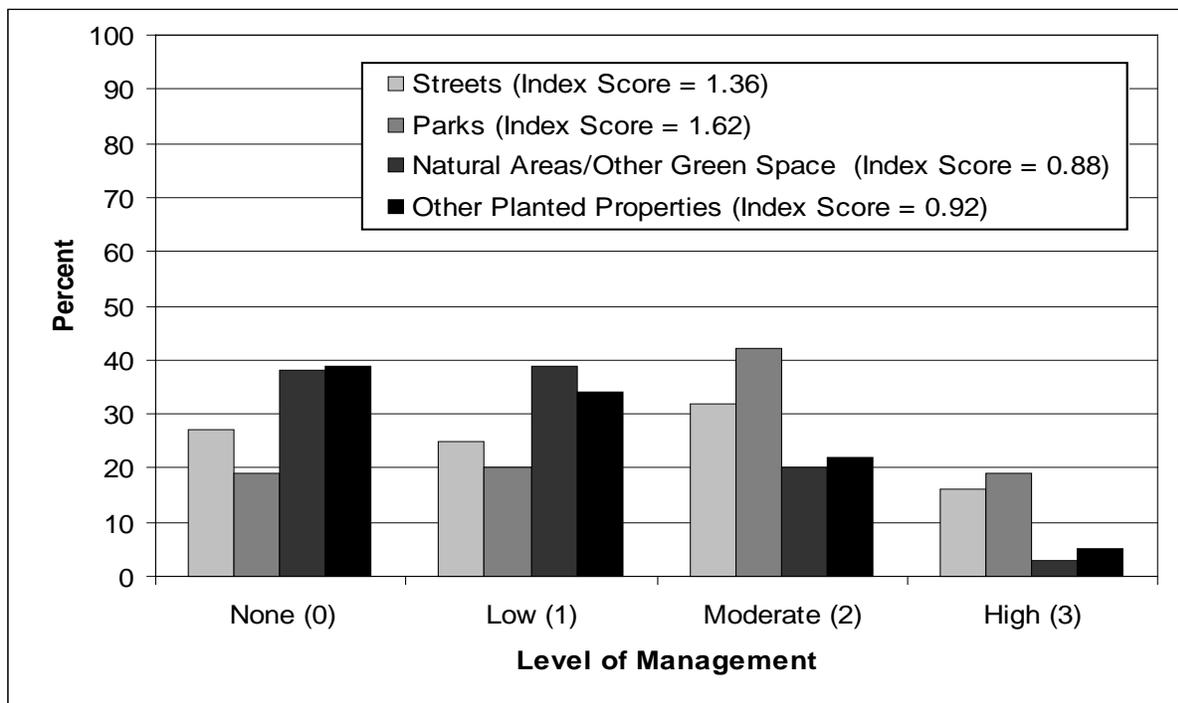


Figure 1-1. Level of urban forest management by municipal area. (Index score derived from mean score of all responses within a municipal management area.)

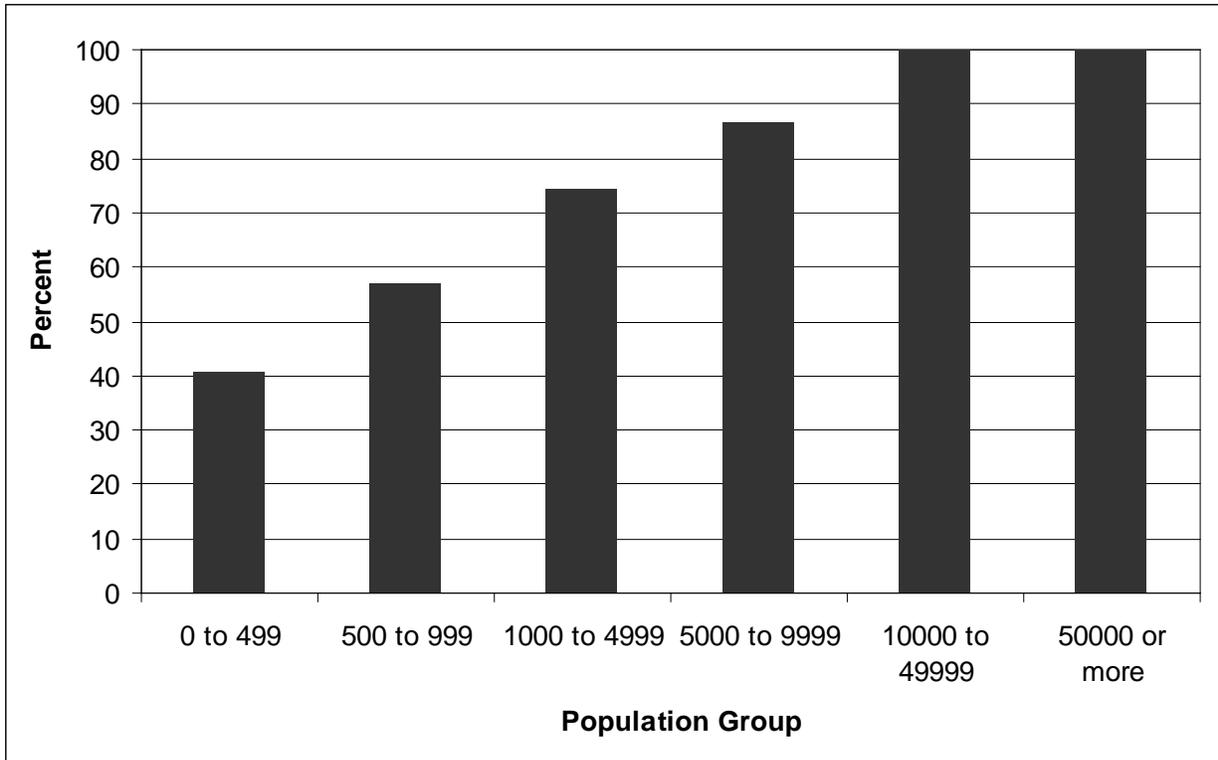


Figure 1-2. Percent of communities with staff that oversee the care of municipal trees disaggregated by population class?

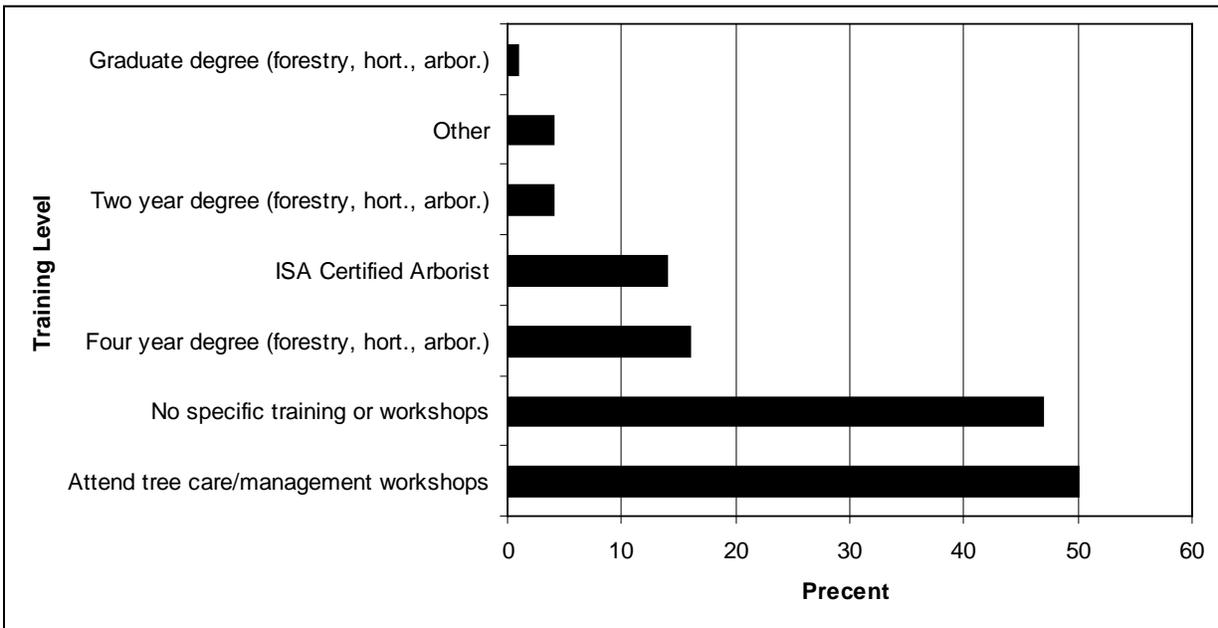


Figure 1-3. Training level for all staff responsible for management of the tree program.

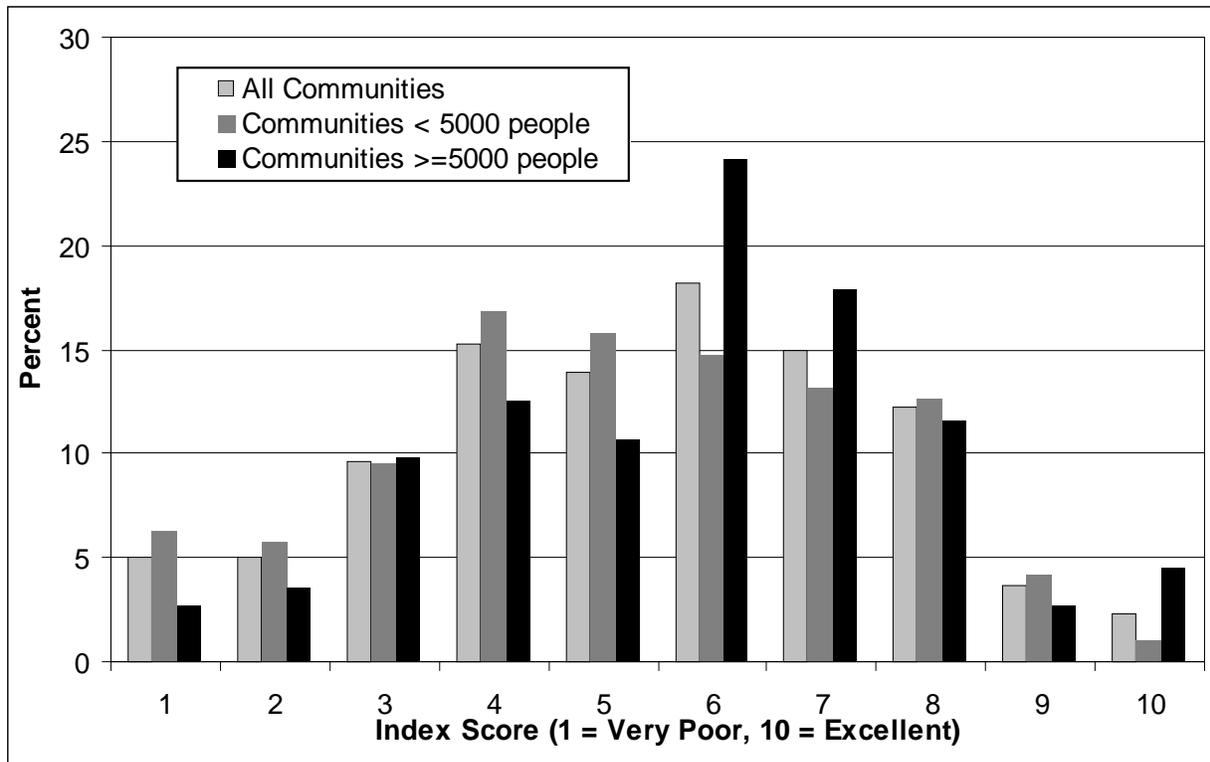


Figure 1-4. Community elected officials' level of understanding and embracement of the importance of urban forests and need for sound U&CF management.

Section II – Budget

Section II was designed to uncover how many communities have funds for trees and their care along with the level of funding. We also asked if budgets were expected to stay the same or change and if funding was adequate to meet identified needs. Finally, we determined sources of funding and what percentages were spent on planting, tree maintenance, removal, and other activities. Key findings follow:

- Over half (53%) of communities have a budget for trees and their care. Communities that had budgets indicated their spending ranged from \$200 to 14,033,000 with a mean \$127,070 budget (Figure 2-1).
- Per capita spending varied from 0.03 to 66.0 in communities that had a budget. Looking at all communities (those with and without an U&CF budget) per capita spending increased from \$0.72 (0 to 499 population class) to \$9.24 (50,000 and more population) (Figure 2-2). Budget similar was the least in the smallest population class (\$264) and increased to (2,030,562) on average in the largest population class which was influenced greatly by the budget of Milwaukee. Another way to look at budgets and per capita spending is to only look at communities with budgets (Figure 2-3). The same budget trend with the smallest population class having the lower budget (\$2167) and the largest communities the highest average budget (2,030,562).

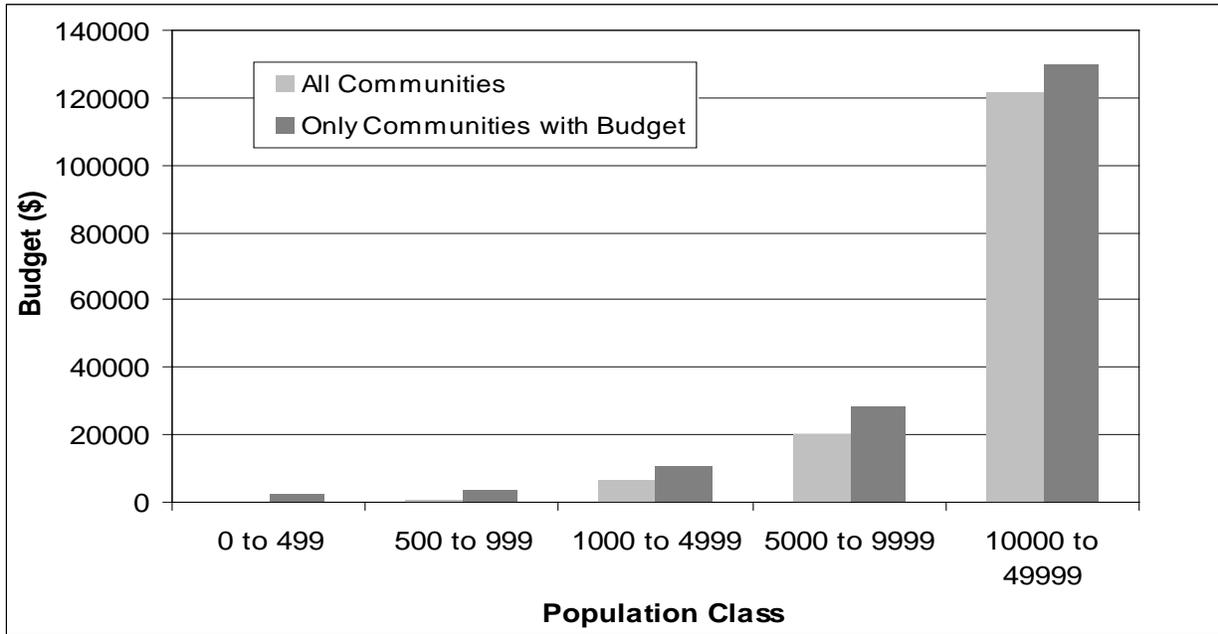


Figure 2-1. Budget spent on tree management for all communities and by only communities that had a budget.

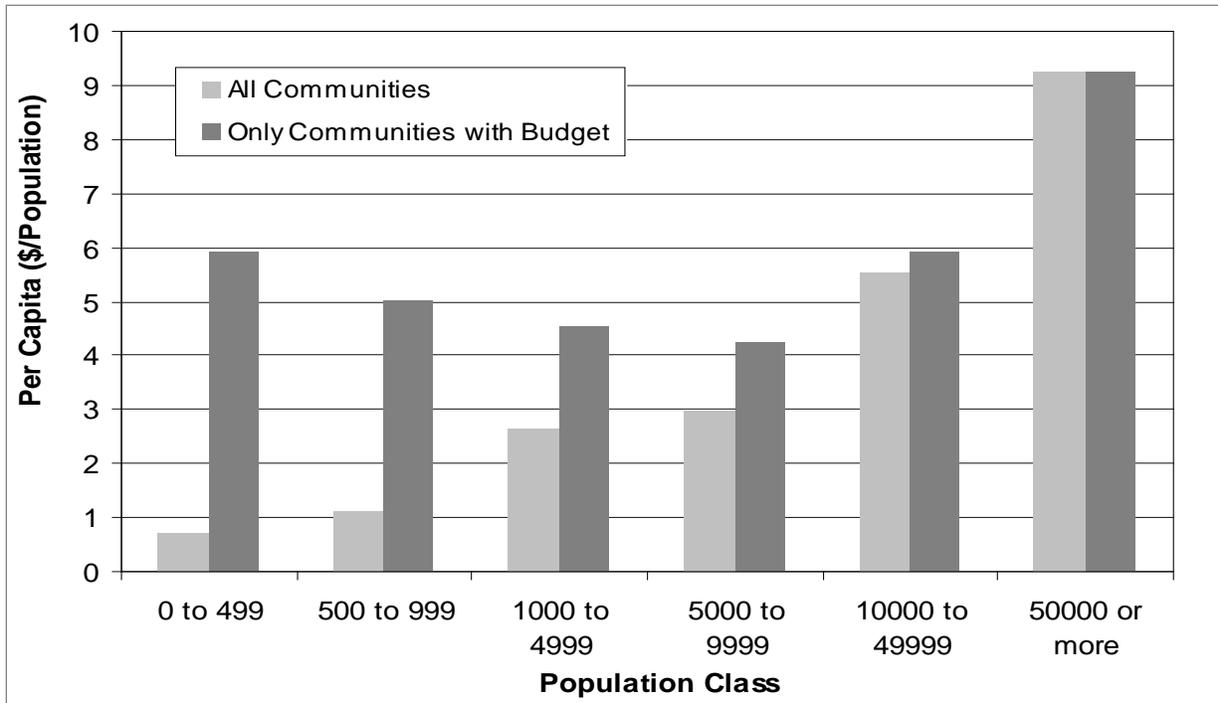


Figure 2-2. Per capita spending on tree management for all communities and by only communities that had a budget.

Using the same approach for per capita spending of only communities with a budget does not have the same trend as all communities. The largest population still had the highest per capita spending (\$9.24), however the smallest population class was similar to the second greatest population class with a \$5.91 per capita figure. The 5000 to 9999 population class was the lowest per capita at \$4.22.

- A regression analysis found several (6 of 9) of the large communities ($\geq 50,000$ people) were outliers (regression residuals > 3 standard deviations) compared to most communities in the state. A model of the remaining 202 communities with budget and population data predicts \$7.76 per capita spent on the urban tree care (Figure 2-3).
- Smaller communities are less likely to have a budget. Fewer than 25% of communities with less than 1000 people have a budget, compared to 60% or more of towns with 1000 or more people having a budget. (Figure 2-4).
- Approximately 60% of communities expect their budget to stay the same and approximately 15% each expect the budget to increase or decrease, and 7% did not know.
- Nearly 70% of communities responded that funding is moderately adequate, adequate, or very adequate to meet identified program needs (Figure 2-5).
- The general fund is the primary means to fund the U&CF program in approximately 97% of communities that use general fund monies to support 89% of program funding. Approximately 22% of communities use DNR grants to support an approximate 4% of budgets statewide.
- A total 35.8% of budgets were spent on tree maintenance followed by removal (31.4%), planting (22.2%) and other activities (10.4%) such as indirect costs and personnel management.
- An estimated 34.5 million dollars is annually spent by communities on the care of urban trees under their management.

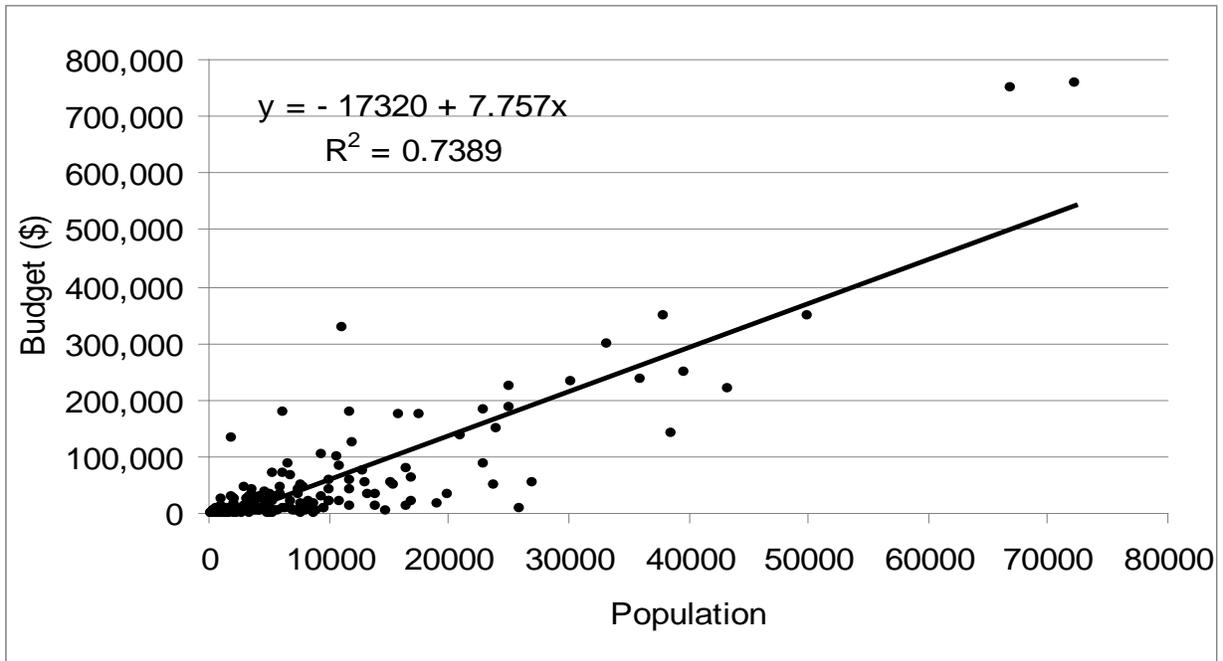


Figure 2-3. Regression of population on budget for communities with a budget. Excludes outlier cent of communities who have a budget for trees and tree care disaggregated by population class.

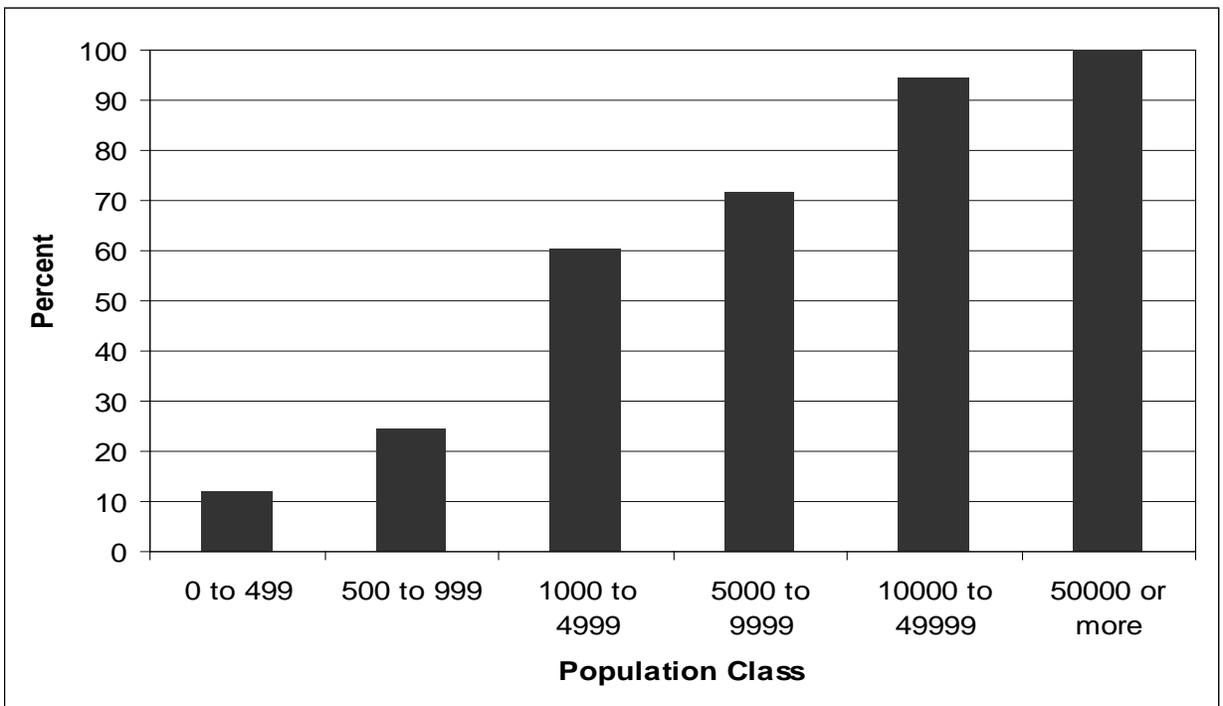


Figure 2-4. Percent of communities who have a budget for trees and tree care disaggregated by population class.

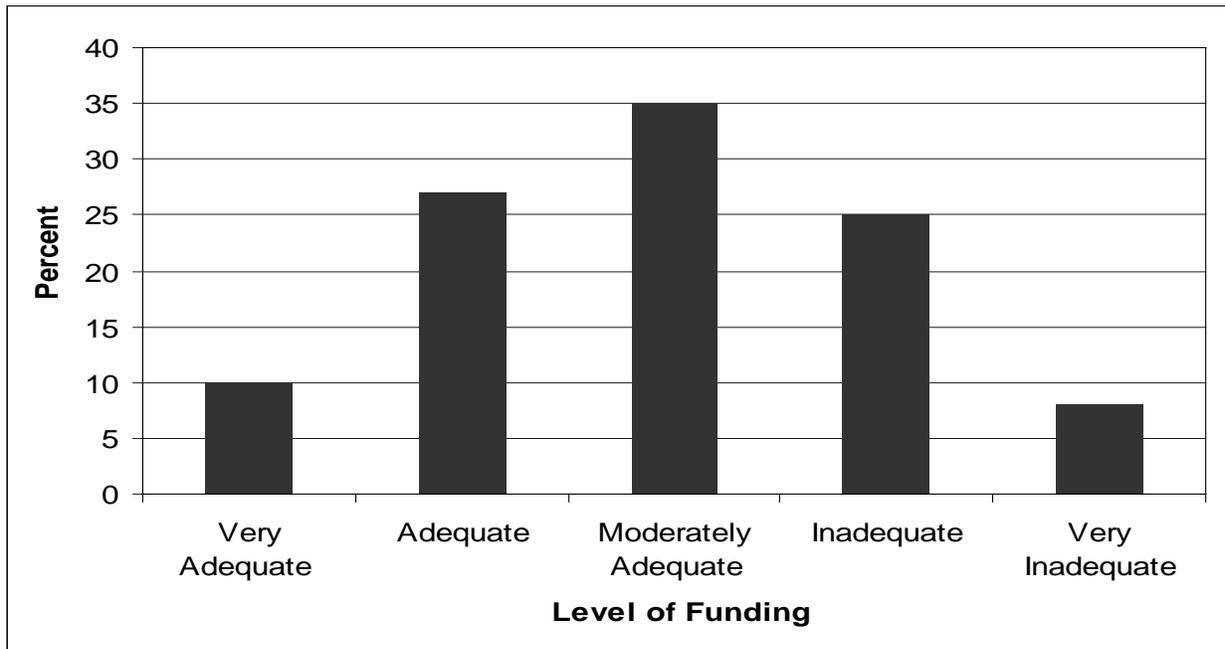


Figure 2-5. Perceived adequacy of funding for community trees.

Section III – Tree Management Profile

Section III questions were used to establish how tree management policy is set and the planning process used for managing trees and the urban forest. Standards incorporated into tree management plans were quantified. Finally, tree ordinance development, enforcement, and topics covered by ordinances were discovered. Key findings include:

- A committee may have multiple organizations involved with tree management. The city council or village board is most likely involved with establishing tree management policy in 65% of communities statewide. Tree boards, park boards, or the park & recreation department were similarly involved in the low 20% range with policy development followed by 13% of communities involving the forestry department.
- Only 45% of communities use a citizen tree board, parks board, or city department to set policy.
- A written tree, urban forest, or land use management plan exists in 40% of communities with goals for tree condition and species diversity existing in approximately 2/3rds of the plans (Figure 3-1).
- All plans (urban forest management, urban forest strategic, emerald ash borer, land use management, and other plans) were similarly regarded as moderately effective (2.0 to 2.1 scale, 1 = low and 3 = high) for managing the urban green space.

- More communities (43%) reported they had not heard of listed tree management standards and subsequently do not incorporate them into management. However, 41% did so with ANSI A300 or 31% with ANSI Z133.1 standard.
- More communities (63%) had a community tree ordinance than those who did not and staff were most likely involved with ordinance development (83%) followed by consultants (42%) and volunteers (18%).
- Ordinance enforcement was regularly conducted in 64% of communities.
- Regulation of dead and diseased tree removal, hazard tree or public nuisance abatement, and regulation of species were topical areas in ¾'s or more of communities with ordinances (Figure 3-2).
- The municipality is most likely responsible for maintaining trees between the curb and sidewalk in 79% of communities followed by the abutting property owner (17%) or both (4%).

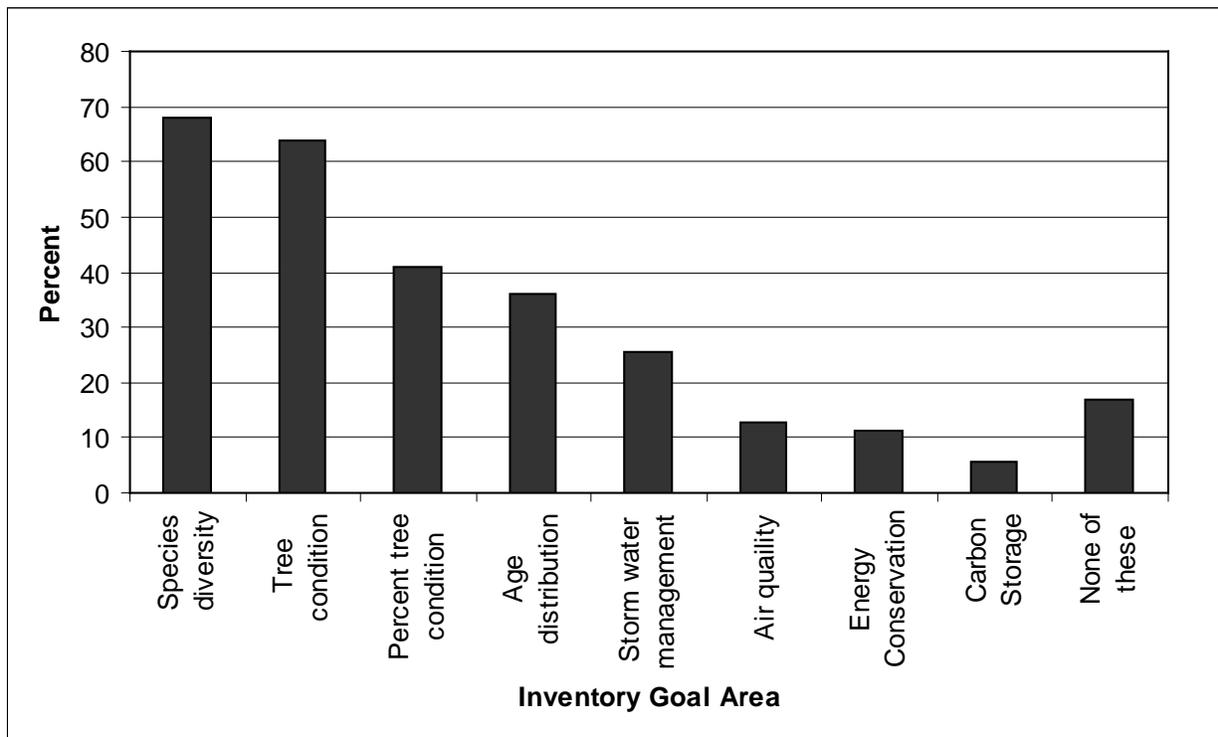


Figure 3-1. Goals included in tree, urban forest, and land use management plans.

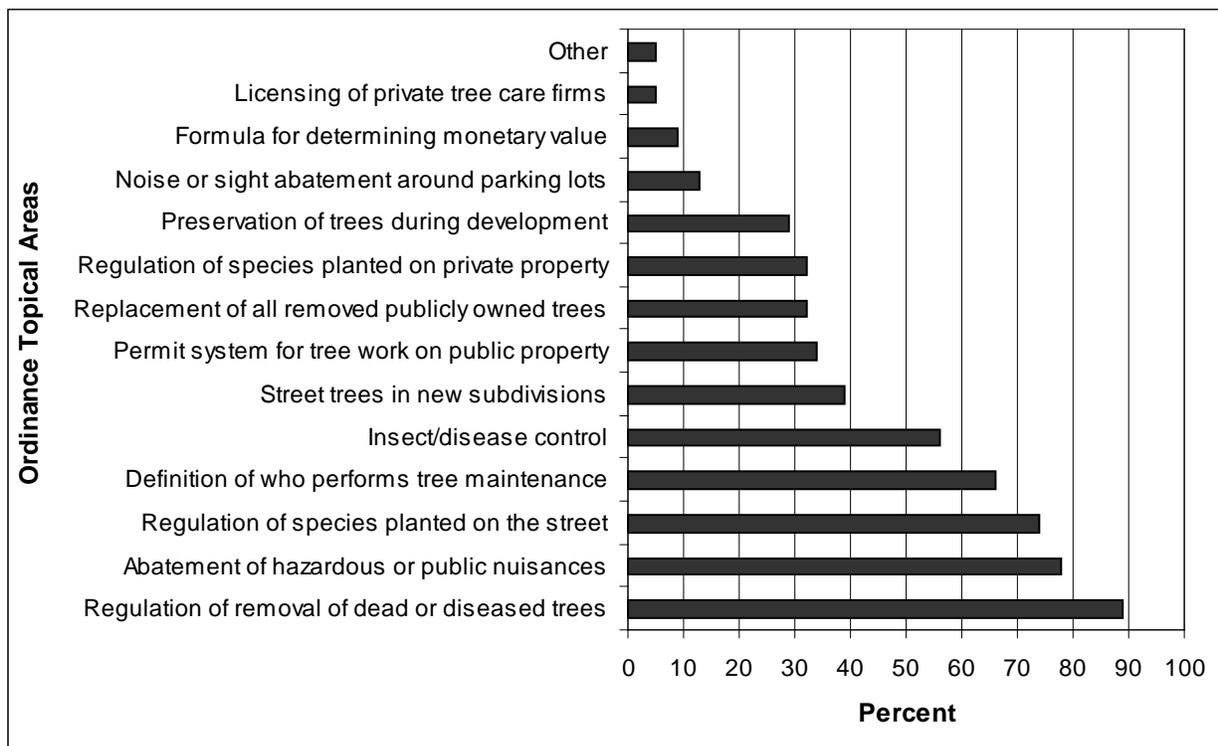


Figure 3-2. Percent of ordinances with the following topical areas.

Section IV – Volunteers

Volunteers are one way to generate community interest and support of urban forest management. Volunteers can also be sources for tree planting and tree care. Questions were created to see how many communities use volunteers and volunteer organizations involved with tree care or management. Finally, we determined the percentage of time volunteers are involved with various U&CF activities. Key findings include:

- Twenty-nine percent of communities used volunteers for public tree care.
- Approximately 45% of towns use local government members (city council or village board), school groups, and individual residents as a volunteer type. Tree boards (33%) and park boards (38%) were also used in a third or more cases (Figure 4-1).
- Tree planting was the number one reported activity in nearly 80% of towns using volunteers which accounted for 40% of the time associated with tree planting in these locations (Figure 4-2).
- Other volunteer activities in communities were tree maintenance (50%), awareness and education (36%), and developing management plans and policy (31%).

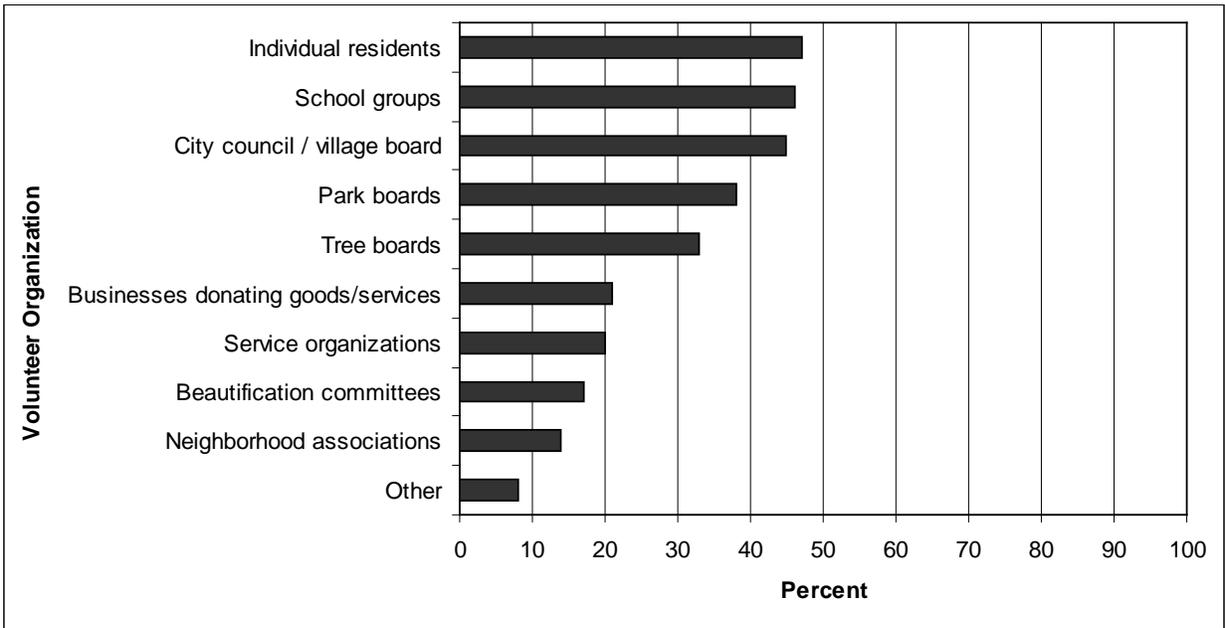


Figure 4-1. Volunteer organizations that carry out tree care or management.

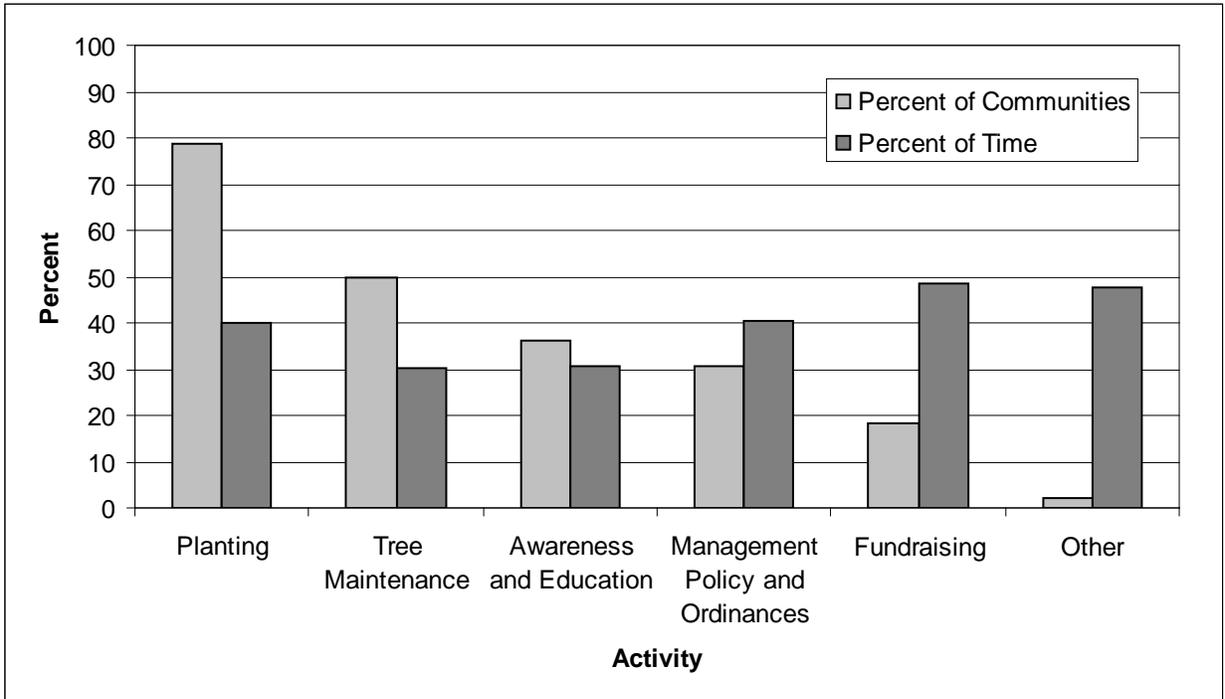


Figure 4-2. Volunteer activities and time associated with activities.

Section V – Contractors

The use of contractors is another way to support management of the U&CF. Questions were created to see how many communities use contractors for tree care or management. Finally, we ascertained if communities required contractors to use industry standards with tree care operations. Key findings include:

- Sixty-four percent of communities use contractors as a component with their urban forest management.
- Only 42% reported that standards such as ANSI A300 were required with performance of pruning or maintenance. Thirty percent reported no and 28% did not know.
- Tree removal was most commonly reported contractor operation in 89% of communities and 47% of the time required for tree removal involved contractors (Figure 5-1).
- Tree maintenance (54%) and tree planting (35%) were also a fractional part of urban forest management in communities using contractors.

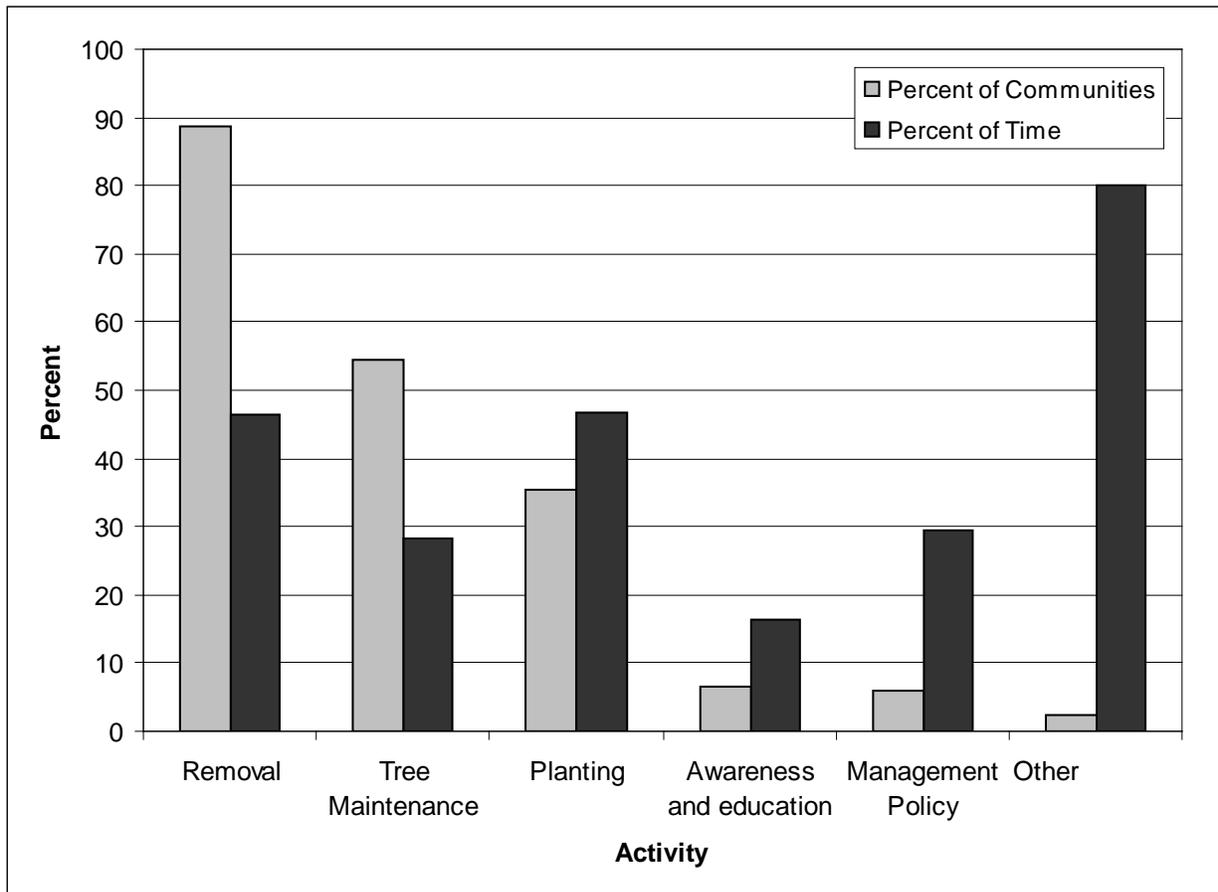


Figure 5-1. Contractor activities and time associated with these activities.

Section VI – Inventory

Questions were developed to find out how common tree inventory systems were in Wisconsin communities. Communities that had inventories were then asked if they were current, how frequent they are updated, methods used to inventory, and areas covered. How the data was collected, integration with geographical information systems (GIS), and who completed the inventory was determined. Further, we asked information on how many trees were present and how many tree vacancies exist. Key findings follow:

- One-third of communities in Wisconsin have a tree inventory and of these locations approximately half of the inventories are current with 13% developing and the remainder (38%) not current.
- Updating of inventories varies considerably with 18% updating them monthly or sooner and others doing so annually (26%), every five years (21%), or other time (18%) frame.
- Communities used one or more inventory methods with windshield surveys (46%) and 100% (i.e., complete) population surveys (51%) most common. Few communities used sampling (8%), canopy coverage analysis (3%), or recent USDA-FS developed UFORE (3%) and STRATUM (3%) inventory and analysis systems.
- Inventories were most likely used for street trees (94%) or high use park areas (62%).
- Approximately two-thirds of inventories are computerized, one-third is linked to a GIS, and 20% are linked to a community's other infrastructure inventories.
- Pen and paper are most commonly used to collected data in 73% of communities. Other tools including PDA's, GPS, and field computers (laptop and Tablet-PC) are used in fewer than 25% of communities (Figure 6-1).
- Municipal staff (48%) and consultants (54%) were most likely to be involved with completing the community's inventory.

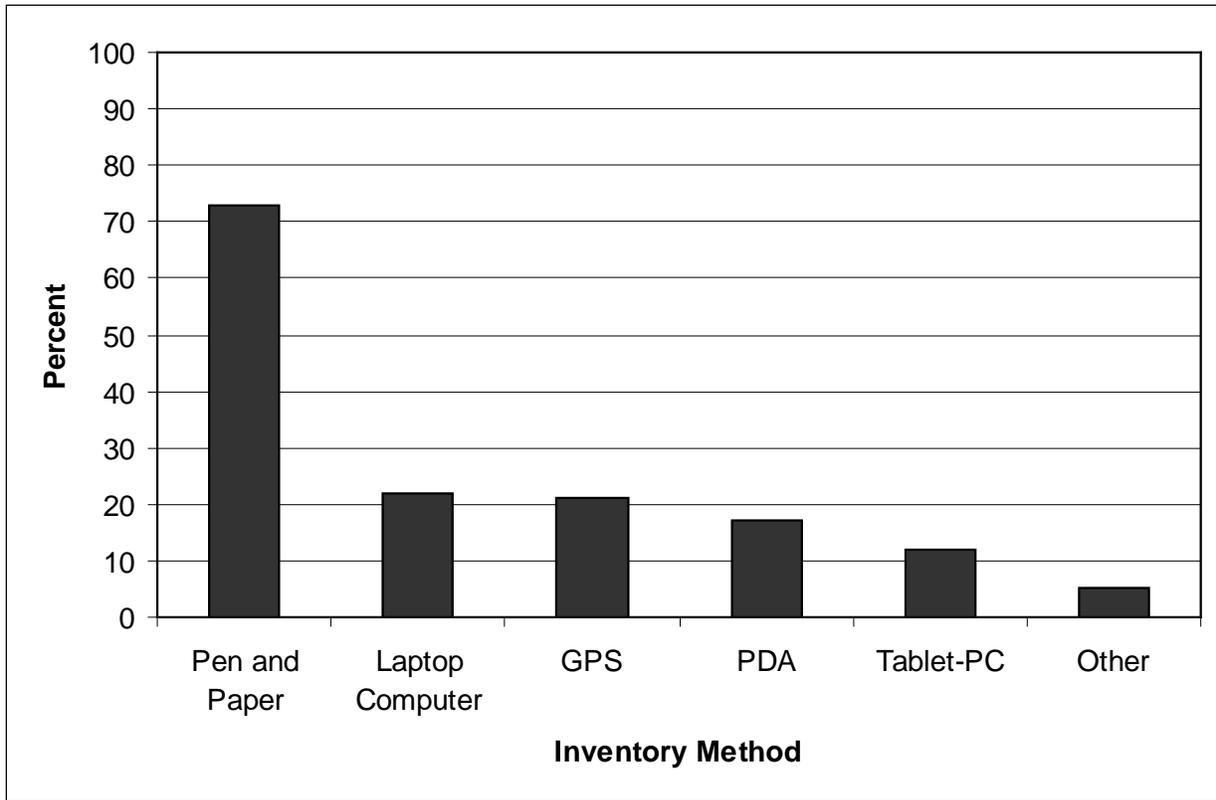


Figure 6-1. Inventory tools used by communities.

Section VII – Operations Profile

This section of the study focused on describing the operations associated with the planting, maintenance, and removal of trees. Respondents answered questions about the number of trees planted, pruned, and removed. They told us how frequently they prune trees, if removals have changed over the past five years, and if they culture their own trees through a community nursery. Finally, they indicated different types of urban forest management activities they perform. Key findings follow:

- Fewer than half (43%) keep records on tree planting which ranged from 0 to 3708 trees planted with 105 planted on average in a community in 2007. Average tree plantings exceeded the average 78 trees removed in a community. Removals ranged from 0 to 3453 trees.
- An average 616 trees were pruned in 2007 in a community with 0 to 48,515 pruned by a community.
- Trees were pruned as needed in 71% of the communities with 15% not pruning and 14% pruning on a regular cycle which averaged 5.1 years in length.

- No apparent shift in tree removals occurred state-wide with 44% remaining constant, 16% increasing, 9% decreasing, and 31% of communities uncertain.
- Nurseries were used to culture trees in few (8%) communities. Those that grow trees typically grow a portion of annual tree planting requirements with 65% growing 25% or fewer of tree planting needs and 25% growing trees to meet 50% or more of tree planting needs.
- Public tree management is regularly performed to inspect for and remove diseased trees (76%), inspect and remove and hazardous trees (88%), and conduct tree removal to control disease and safety hazards (93%) by most communities (Table VII-1). Operation of a wood and brush disposal site on municipal property is also common in nearly three-fourths of communities.
- Technical assistance for private trees occurs in 33% of communities and routine inspections for private hazardous (15%) or diseased (12%) trees is less common (Table VII-1).

Table 4. Urban forestry management activities conducted in a community.

Urban forestry management activities	Yes	No	Percent Yes
Tree removal conducted on municipal property to control disease or eliminate safety hazards	288	22	93
Conduct routine inspection and removal of hazard trees on public property	273	37	88
Conduct routine inspection and removal of diseased trees on public property	237	73	76
Operate a recycling site for disposal of wood and brush for residents	228	82	74
Perform formative tree care for 3 to 5 years after tree planting	128	182	41
Provide technical assistance (information, material, or services) for tree maintenance on private property?	101	209	33
Conduct routine inspection and removal or hazard trees on private property	45	265	15
Conduct routine inspection and removal of diseased trees on private property	36	274	12
Regularly schedule maintenance of trees on private property (i.e., green easement)?	10	300	3
Provide financial assistance to private property owners for diseased tree removal	8	302	3

Section VIII – DNR Urban Forestry Grant Program

Understanding the outcomes of the DNR Urban Forestry Grant Program is important considering Statute 23.097 and Administrative Codes NR 47.50 – NR 47.58 provides authorization and guidance for financial assistance. Questions sought information on the familiarity with the program, if a community has ever applied for a grant, and reasons why non-applicants did not apply. As for applicants, we sought to describe the percentage of applicants who received a

grant, their attitudes about the application process, and experience with the reimbursement process. Finally, we described if funding limits should be altered. Key findings follow:

- Two-thirds of communities have heard of the urban forestry matching grant program (Figure 8-1).
- Few (26%) communities were aware of the new simplified Startup Grant for communities. Note, the program was just implemented during the data collection phase of this study.
- Approximately equal numbers of communities had applied for an urban forestry grant (Figure 8-1).
- As community size increases, the respondents were more likely to have heard about the grant program (e.g., 35% for the <500 population group versus 100% for the 50,000 or more population group) and have applied for a grant (Figure 8-2).
- Nearly all communities (96%) who applied for a grant received a grant. Community size had no affect on receiving a grant (Figure 8-2).
- Several reasons were given by small communities as to why they did not apply for an urban forestry grant (Figure 8-3). The two most cited reasons were a lack of money or employees to match the grant (3.64 index, 1 = strongly disagree and 5 = strongly agree) and insufficient information about the grant program to make a decision (3.60). Other given reasons were tree management is not a priority (3.41), community is too small (3.41), no one ever contacted me (3.28), and too many records to keep (3.25).
- Grant applicants were overall positive or neutral with attitudinal statements about the grant application (Figure 8-4). The grant application was considered straightforward, it helped applicants focus on the project, an adequate amount of technical service was provided, and record keeping was an easy process.
- Reimbursement for grants was considered straightforward by most, receipt of the reimbursement check was sufficiently quick, they were able to easily provide request information, and follow-up requests for information were not considered a hassle by most.
- Respondents believe the upper and lower limits are still adequate with only 24% saying the upper limit should be increased and 7% suggesting the lower limit be increased.

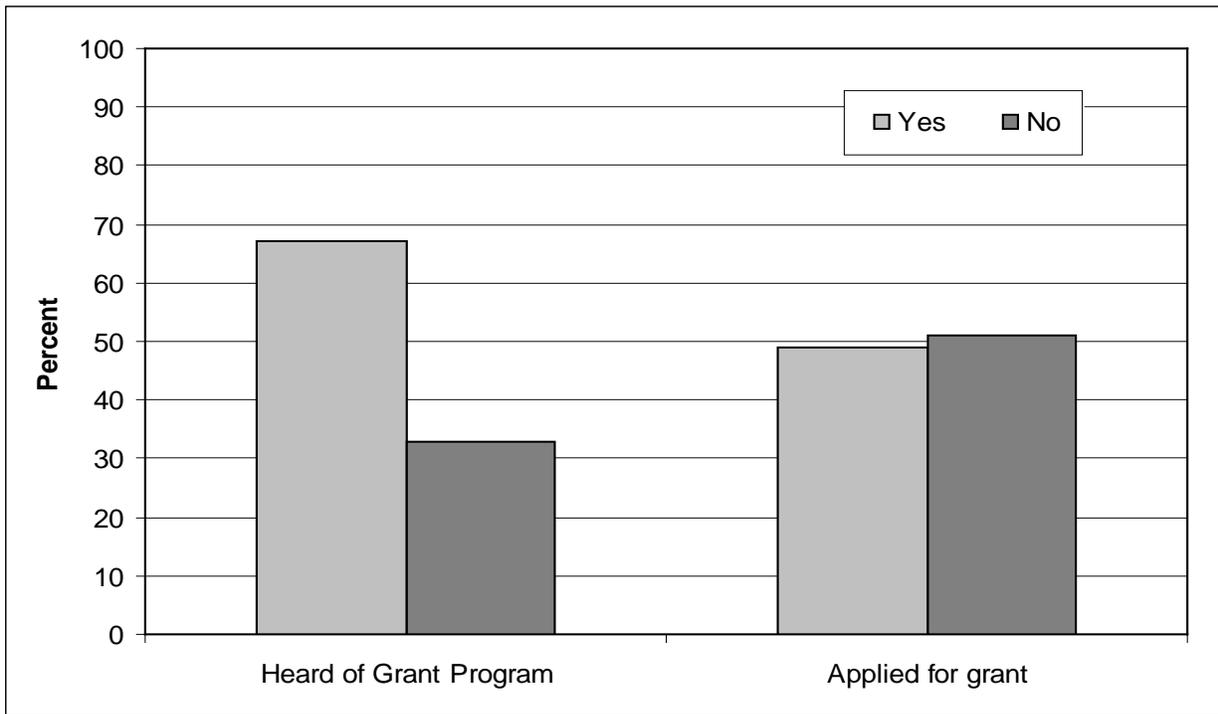


Figure 8-1. Number of respondents who heard of the urban forestry grant program and percent of communities who had applied for a grant.

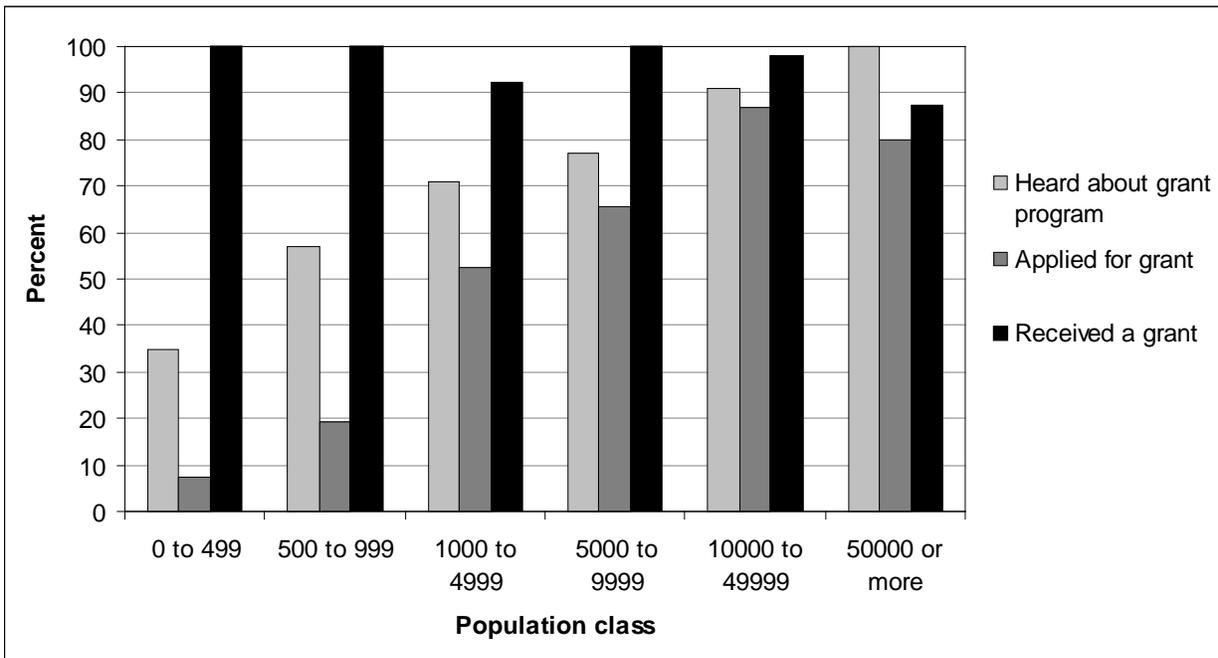


Figure 8-2. Comparison by population class of the number of respondents who heard of the urban forestry grant program, applied for a grant, and percent of applicants who received a grant.

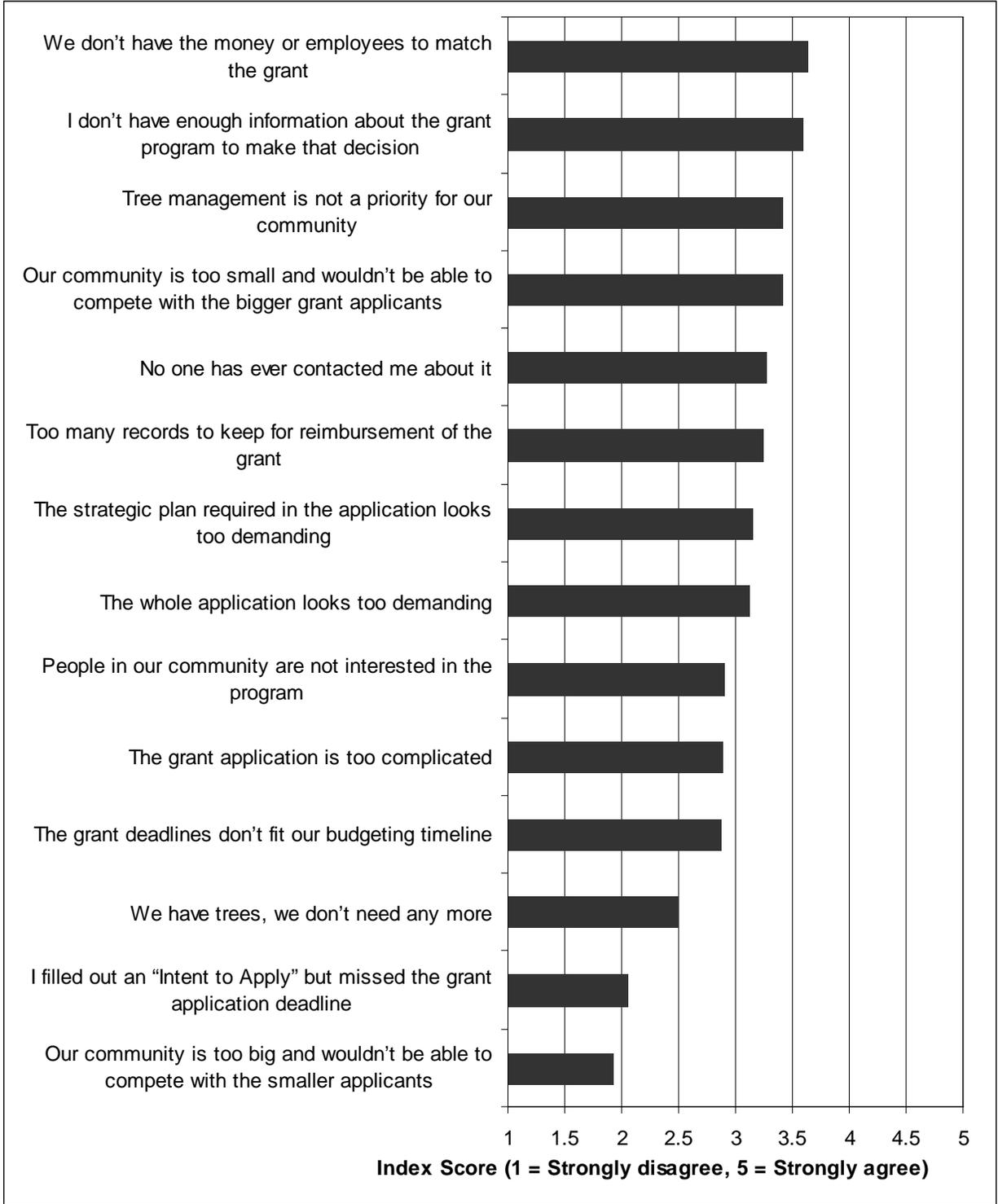


Figure 8-3. Reasons given for not applying for an urban forestry grant.

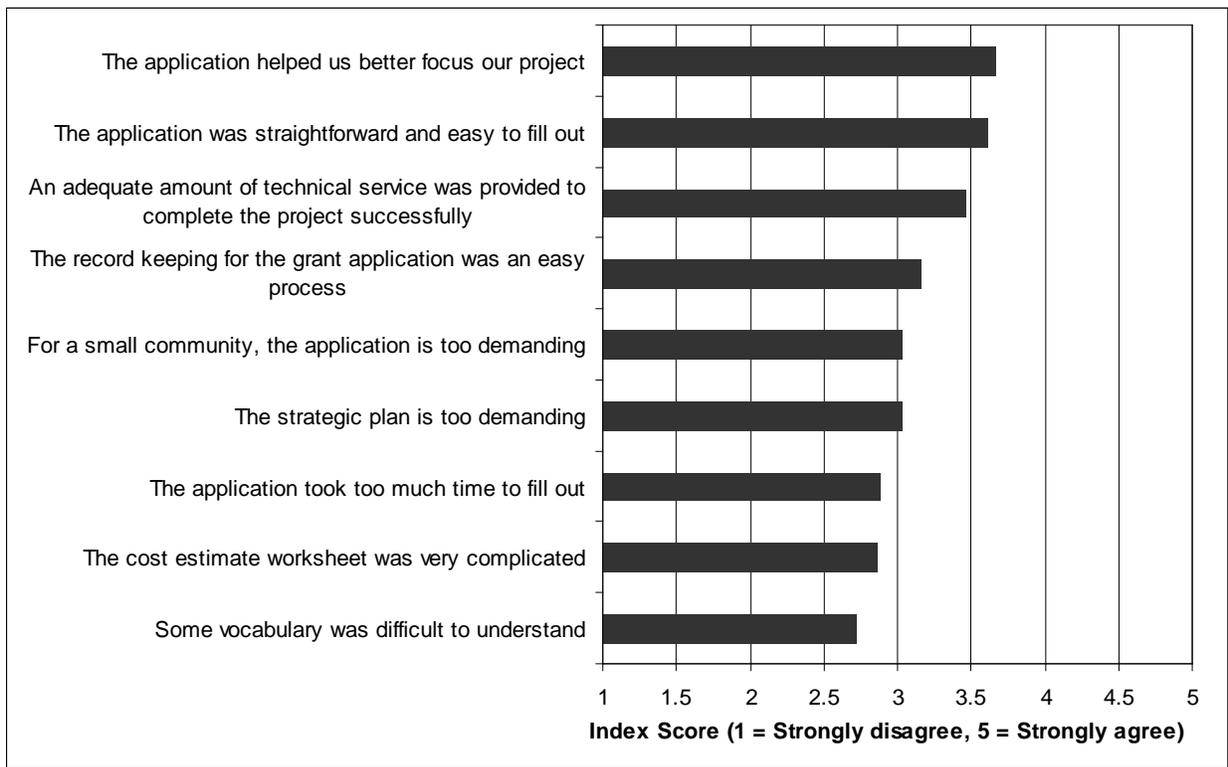


Figure 8-4. Attitudes about the grant application.

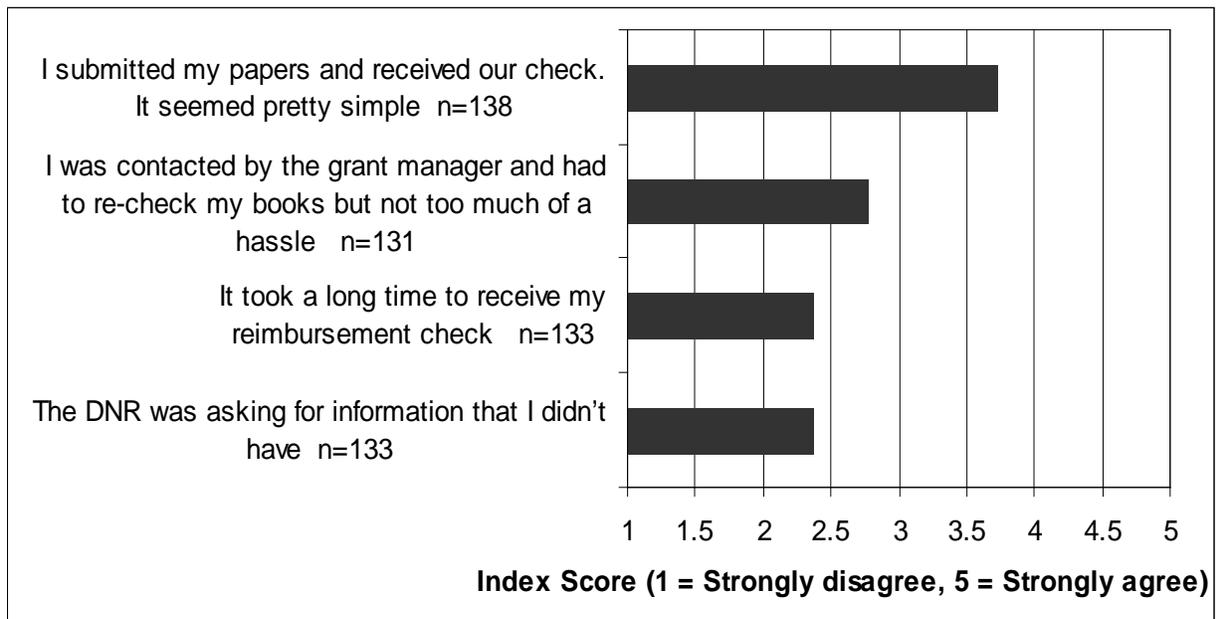


Figure 8-5. Attitudes about the grant reimbursement process.

Section IX – DNR Urban Forestry Services

The WIDNR U&CF program conducts five forms of assistance including technical assistance, resource development (financial assistance), education and training, public awareness, and resource assessment to support the program mission (Table 1). Resource assessment through questions in this study were created to assess outcomes from the first four assistance mechanisms listed above. These included asking communities if they had received assistance within the past 12 months, how frequent and which areas they received assistance, and rating the assistance they received. They indicated which topical assistance areas they received and provided insight into their awareness and participation with educational services and publications. Finally, they described their familiarity with the Tree City USA program and communities which were not a TREE City USA told us which of standards for that program they currently meet. Key findings follow:

- Nearly 4 out of 10 communities (38%) during the past 12 months received assistance from DNR urban forestry staff.
- They were most likely to receive assistance through educational services and did so 8.4 times on average in a year for the 85 communities that responded. Annually, technical assistance averaged 5.3 assists (81 respondents) and financial assistance was 1.9 assists (30 respondents).
- The quality of the assistance provided was highly regarded with most recipients indicating assistance was excellent or near excellent (Figure 9-1). An index score of 8.7 (1 = poor and 10 = excellent) resulted from DNR provided assistance.
- Resource materials were the most frequent form of assistance communities used with 74% indicating they received this (Figure 9-2). Diseased tree questions, finding out what other communities are doing, and grant application questions were also common to over 50% of assistance receiving communities. Volunteer management (8%) was the least received assistance form. Tree removal techniques, damaged tree repair, and emergency storm management were also infrequently received.
- Communities (57%) were most aware of the Urban & Community Forests print newsletter and participated the most (44%) with this publication (Figure 9-3). Respondents were also aware of two electronic educational services, the website (46%) and insider e-newsletter (45%) with approximately 1/3 also participating in these. Awareness with the annual workshops (44%) and annual conference (37%) were also participated by approximately 25% of communities.
- Eight two percent of communities had heard of the Tree City USA program. Communities that were not Tree City USA communities were least likely to have an Arbor Day Celebration (28%) or meet the \$2 per capita (42%) standard (Figure 9-4). They were more likely to meet the tree ordinance/policy (75%) or tree board (61%) standards.

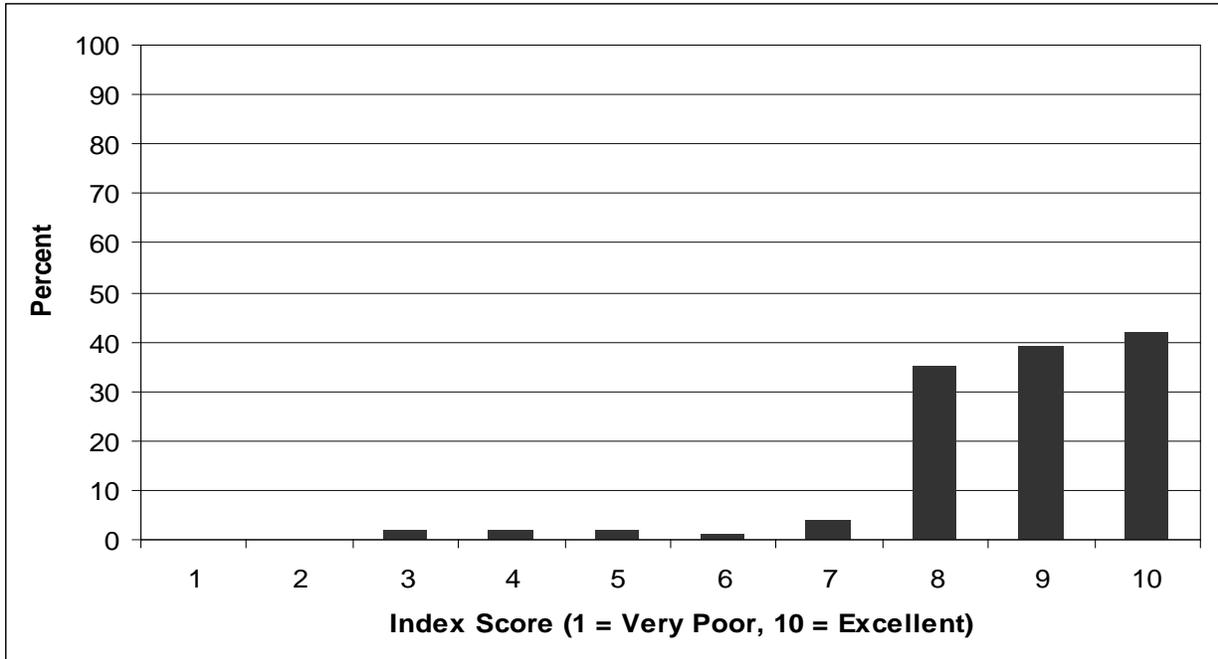


Figure 9-1. Ranking of the assistance received by the DNR urban U&CF program.

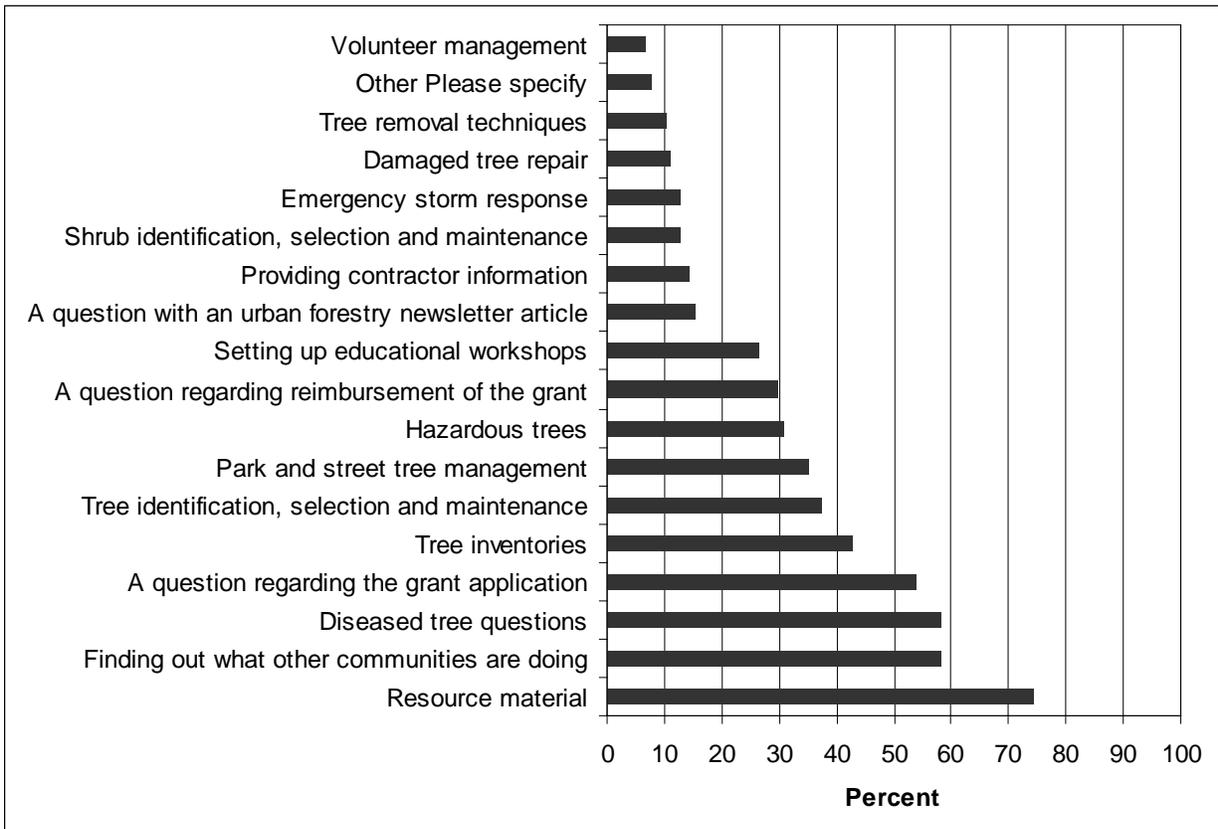


Figure 9-2. Forms of assistance received by recipients.

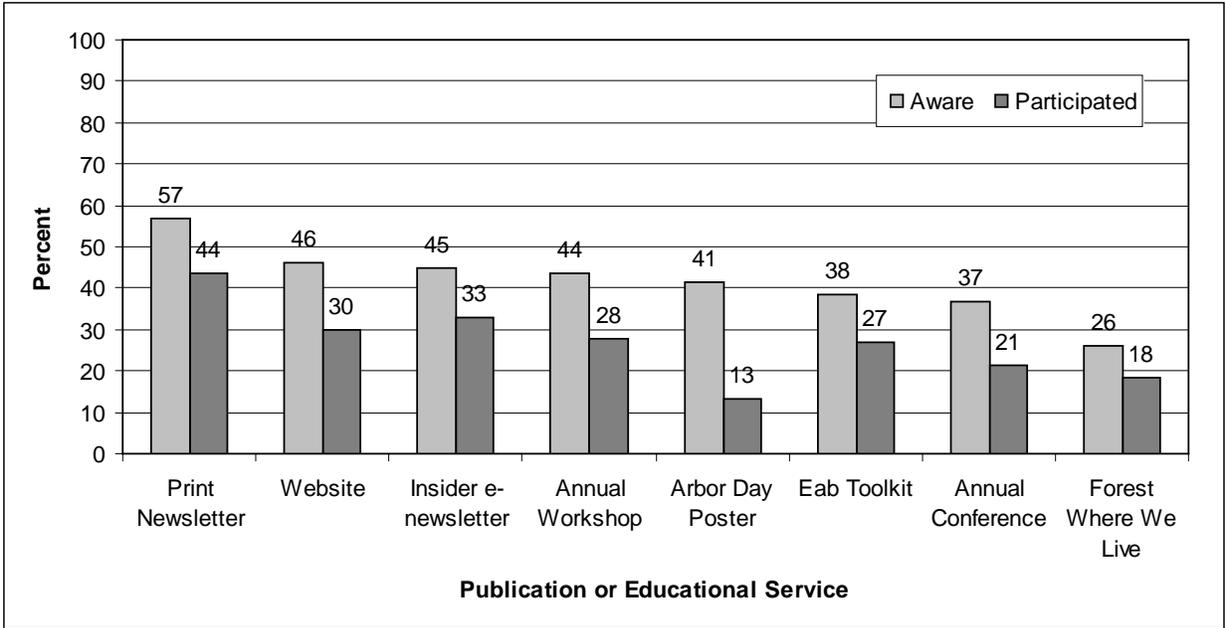


Figure 9-3. Awareness and participation with publications and educational services.

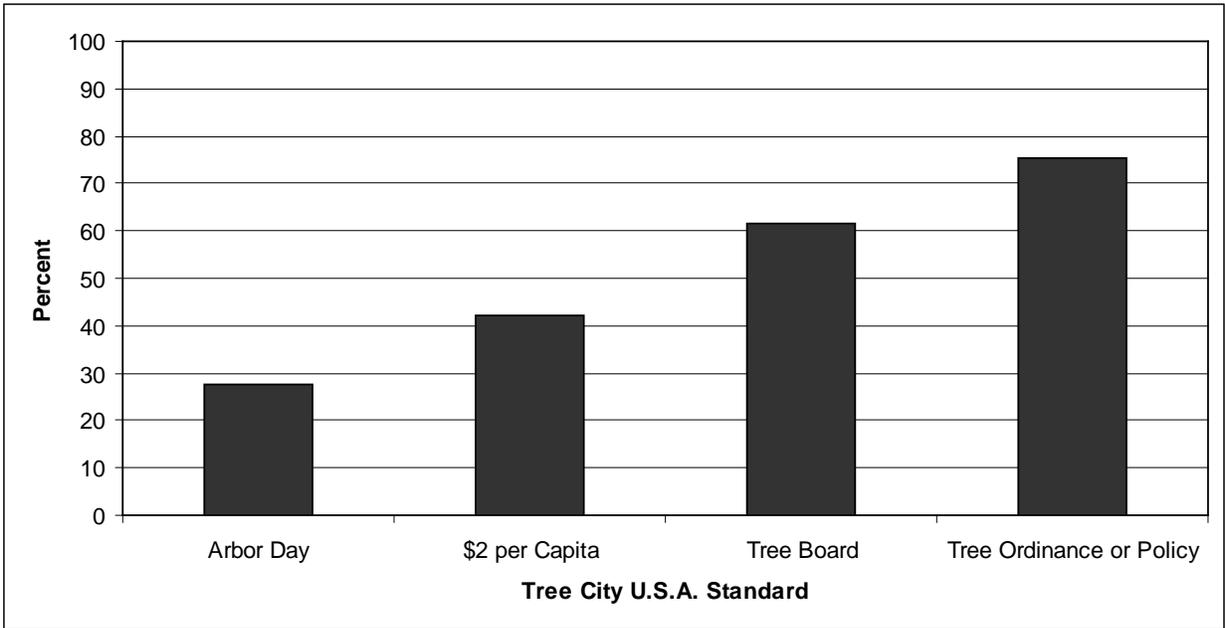


Figure 9-4. Tree City U.S.A. standards meet by communities which currently are not a Tree City U.S.A community.

Section X – Needs Profile

A needs profile served to determine future areas for providing assistance and formats that would best serve communities. Formats ranging from printed material, electronic resources, personal interaction, and grants were ascertained for preference. A multitude of activities for technical service assistance were generated by respondents who provided up to seven priority areas. Finally, communities indicated their assistance priorities from a 1 to 10 scale with 1 being least common and 10 being most common. Key findings follow:

- Respondents have a wide variety of interests with formats for assistance. No one format serves all. Grants were the most requested followed closely by printed material, instructional workshops, one on one consulting, and Videos/DVD (Figure 10-1).
- The top five desired assistance areas were typical urban tree management areas including insects and disease control (58%), employee training in tree care and management (55%), tree planting (54%), tree removal (50%), and tree pruning (45%) (Figure 10-2).
- The DNR Regional Coordinator is the number one source of for assistance (7.03, 1 = least common or preferred to 10 = most common or preferred) followed by another city forester (6.57), tree or landscape company (6.48), and private consultant (6.36) (Figure 10-3).

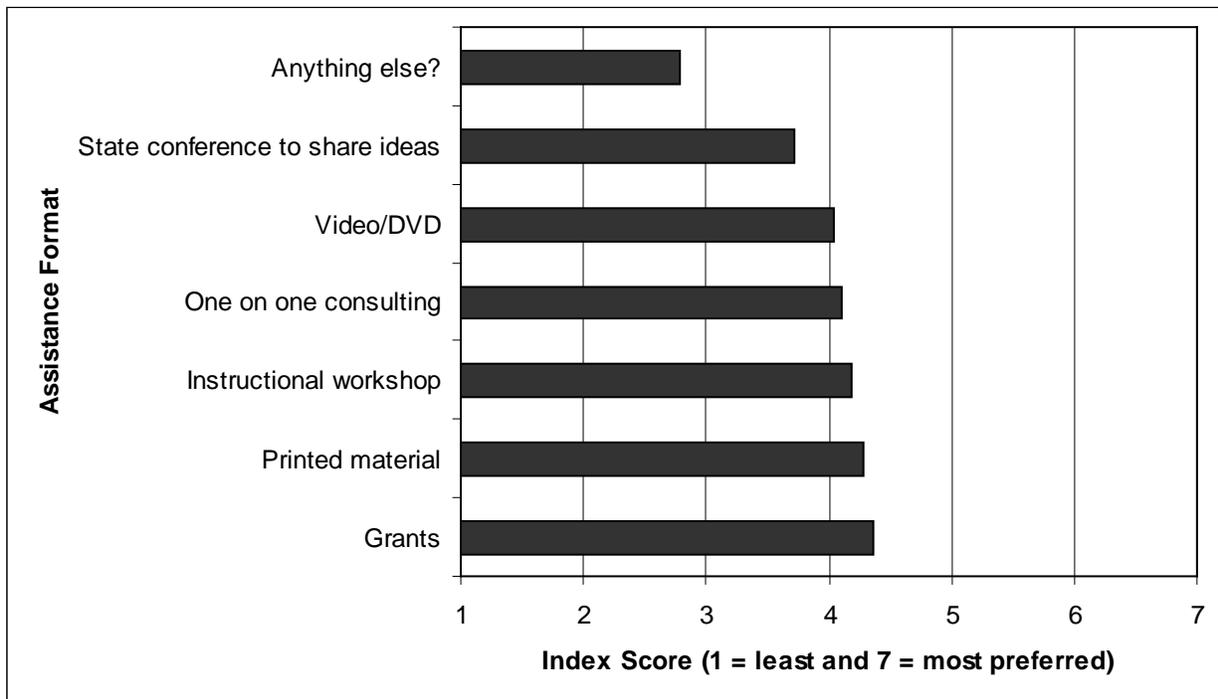


Figure 10-1. Preferred formats for assistance.

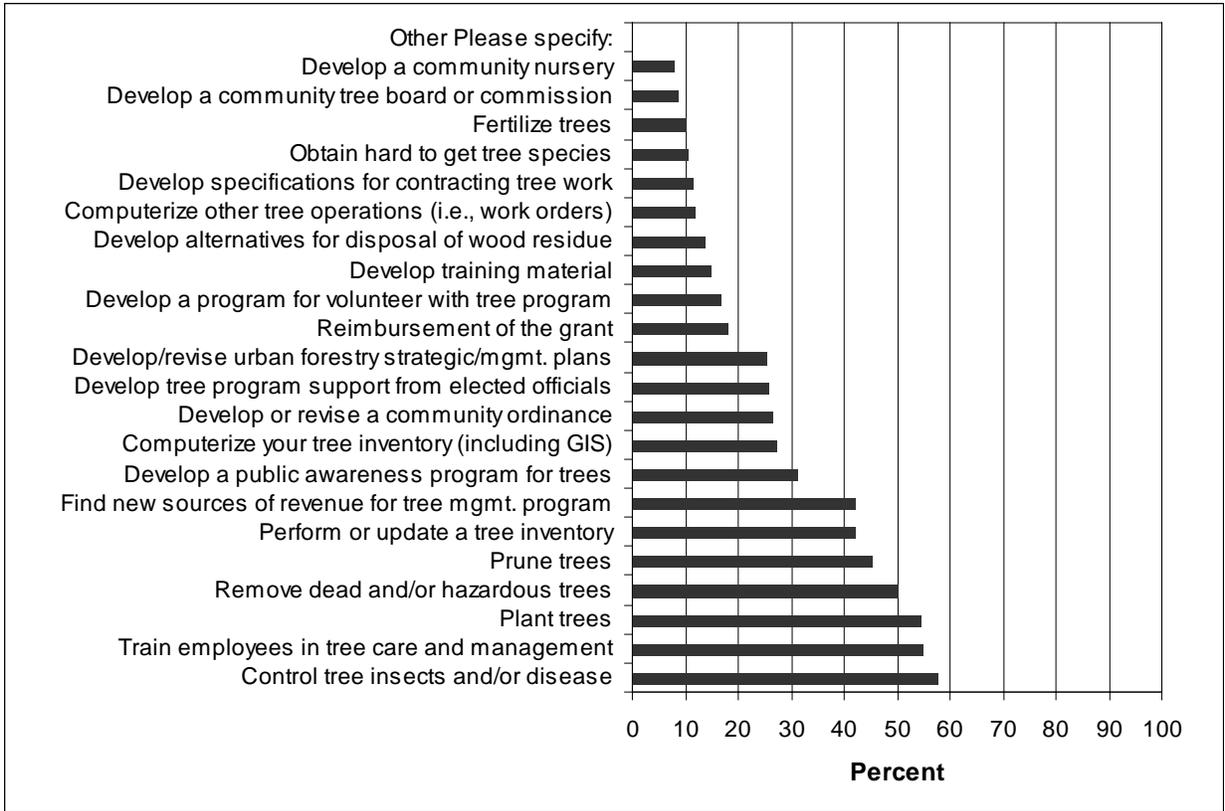


Figure 10-2. Topical areas of desired assistance.

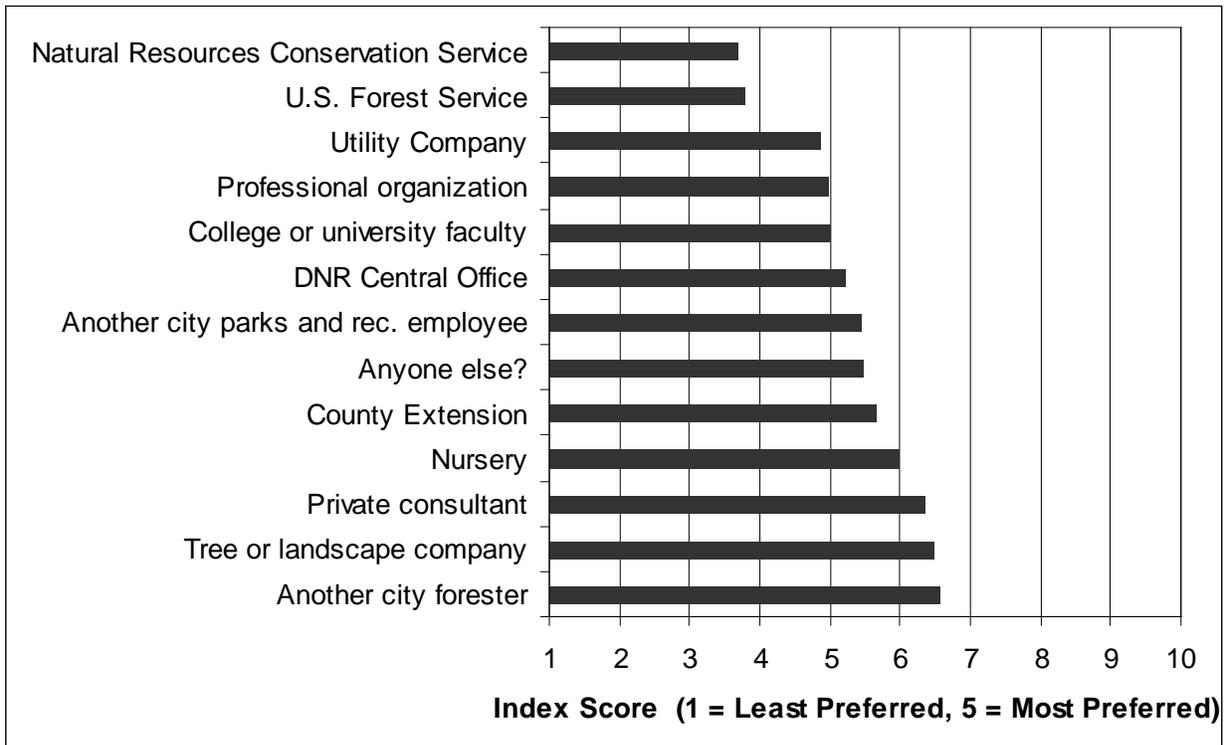


Figure 10-3. Sources of assistance desired by communities.

References

- Casey, C.J. 1988. State Government Involvement in Community Forestry: A Survey and a Proposal for Development of a State Urban Forestry Assistance Program in Wisconsin. M.S. Thesis. University of Wisconsin-Stevens Point, 134 pp.
- Casey, C.J. and R.W. Miller. 1988. State government involvement in community forestry: A survey. *Journal of Arboriculture*. 14:141-144
- Dillman, D.A. 2007. *Mail and Internet Surveys: The Tailored Design Method – 2007 Update*. John Wiley and Sons, New York, NY. 565 pp.
- Hauer, R.J., C.J. Casey Widstrand, and R.W. Miller. 2008. Advancement in State Government Involvement in Urban and Community Forestry in the 50 United States: Changes in Program Status from 1986 to 2002. *Arboriculture & Urban Forestry*. 34(1):5-12
- Miller, R.W. and T.R Bate. 1978. National Implications of an Urban Forestry Survey in Wisconsin. *Journal of Arboriculture* 4:125-126

Appendix – A

Questionnaire and Results
