## TREES IN YOUR COMMUNITY

## Results of 1999 Community Urban Forestry Survey

Table of Contents
Introduction ..... 3
The Study ..... 3
The Results ..... 4
Figure 1: Communities that responded to survey by community size ..... 5
Table 1: Regions aggregated by community size ..... 6
Figure 2: Total number of communities that applied for a grant ..... 7
Figure 3: Distribution of awarded grants by region ..... 8
Figure 4: Awareness and participation in grant program by community size ..... 9
Figure 5: Reasons not to apply for grant ..... 10
Figure 6: Evaluation of grant application process ..... 11
Figure 7: Evaluation of technical support ..... 12
Respondents rate reimbursement process of grant program ..... 13
Suggestions by respondents on how to improve grant program ..... 15
Figure 8: Reimbursement evaluation ..... 17
Figure 9: Urban Forestry product awareness ..... 18
Figure 10: Product awareness by community population ..... 19
Figure 11: Product use by community population ..... 20
Figure 13: Reasons for contacting Regional Coordinator ..... 22
Figure 14: Profile of community needs ..... 23
Figure 15: Preference of assistance format ..... 24
Figure 16: Community tree manager profile ..... 25
Figure 17: Grant recipients and tree management. ..... 26
Figure 18: Percentage of time spent on tree management activities ..... 27
Figure 19: Municipal staffing for tree care ..... 28
Figure 20: Percent of communities with tree budgets ..... 29
Table 2: Size of community tree budgets ..... 30
Figure 21: Source of tree budget funds ..... 31
Figure 22: Volunteers and contractors for tree care ..... 32
Table 3: Mean percentage of operations performed by volunteers ..... 33
Table 4: Mean percentage of operations performed by contractors ..... 34
Figure 23: Tree inventories by community size ..... 35
Figure 24: Relationship between grants and tree inventories ..... 36
Figure 25 :Tree City USA communities ..... 37
Figure 26:Tree City USA community by region ..... 38
Figure 27: Further contact requested ..... 39

## Introduction

This report presents the results of the 1999 survey of Wisconsin's communities' urban forestry programs.

It presents quantitative data on a wide range of topics including community budgets, tree management profile, volunteers, contractors, inventories, as well as evaluative information regarding the tools with which the Urban Forestry Program promotes itself.

## The Study

The results presented in this report are drawn from a mailed, thirty-one page survey sent to a 597 community representatives in Wisconsin.

The survey was designed and conducted by the DNR's Bureau of Science Services. Community representatives were contacted up to five times by: an advance letter, explaining the questionnaire to come, a survey with cover letter, a thank you/reminder post card, a reminder letter accompanied with a duplicate survey, if the survey had not yet been returned and finally a reminder call.

Four hundred and twelve (69\%) communities returned their surveys in time for analysis. Twenty surveys were received after analysis, allowing for a $72 \%$ return rate.

Appendix A provides a detailed comparison of participants and nonparticipants.
Appendix B-provides a detailed comparison of the 1992 and 1999 surveys.
Appendices $A$ and $B$ are not included in the table of contents but are included at the end of the report.

## The Results

Community size matters
Community size effects the level of participation. Although smaller communities are aware of the Urban Forestry Program, they are less likely to participate. Most nonparticipant communities have populations of less than 5,000 .

Tree budgets and tree management staff increase with community size.

## Quality program tools

The program provides good quality tools to attract communities. These tools: grant program, Tree City USA, workshops, annual conference, all provide good incentives to participate.

## Grants

Ninety-one percent of respondents who have ever applied, have received a grant. Again, smaller communities are less likely to apply. Mid sized communities feel the grant application is straight forward, however, the smallest and the largest communities are less than satisfied and have concerns.

Reasons for not applying for a grant include communities that believe they can not match the grant or tree management is not a priority.
Smaller communities also believe they are not large enough to compete with larger communities.

Communities that participate in the Urban Forestry Program are more likely to have an inventory of their trees.

## Program communication and outreach efforts

The Urban Forestry newsletter is the most widely known and used program tool. Nearly three-fifths of those surveyed are aware of and read this document. The Urban Forestry web page is less well known: only one-fifth of respondents knew of it and only one in ten had actually visited it.

## Workshops and conferences

Communities are less aware of Urban Forestry workshops and the annual Urban Forestry conference. Half of the respondents had heard of the workshops and two-fifths knew about the annual conference. Respondents have a favorable impression of all these products and events. They particularly like the newsletter.

## Regional coordinators

Communities have a good relationship with the Regional Coordinators and seek assistance with applications and reimbursements. They also value the consulting and technical assistance and the Coordinators' efforts to help.

Figure 1: Communities that responded to survey by community size


Often we disaggregate data according to the size of the community. Analysis of the data suggests that community size is strongly linked with most elements relevant to an urban forestry program: submitting requests, having staff on board, as well as having an ongoing program

This figure simply shows the distribution of responses according to community size. Eighty-two communities, for example have a population of 5,000 or more people [Nine communities did not report population]. As we shall see, these communities form the core of the Urban Forestry Program in the sense that they are most likely to participate.

Analyst's note: The Urban Forestry Program will need to decide what kind of effort, if any, it wants to make to reach out to smaller communities---communities with fewer than 5,000 residents and how that might be done given their lack of staffing and resources.

Table 1: Regions aggregated by community size

|  | Region |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Community Size | South <br> Central | Northeast | Southeast <br> (North) | Southeast <br> (South) | West <br> Central <br> (East) | West <br> Central <br> (West) |
| Less than 500 | 22 | 12 | 3 | 0 | 19 | 19 |
| 500 to 999 | 25 | 14 | 4 | 1 | 16 | 27 |
| 1000 to 4,999 | 34 | 32 | 18 | 16 | 18 | 34 |
| 5,000 to 9,999 | 9 | 5 | 6 | 6 | 5 | 3 |
| 10,000 to 49,999 | 7 | 11 | 10 | 7 | 5 | 4 |
| More than 50,000 | 2 | 3 | 1 | 3 | 0 | 1 |
| Total respondents | 99 | 77 | 42 | 33 | 63 | 88 |
| Total number of <br> communities | 144 | 120 | 57 | 44 | 94 | 138 |

## Observations:

- This graph shows distribution of respondents' community size by region. This is important in the context that much of the data is analyzed by community size.

The State is divided officially into 5 regions for the purpose of administration. The Urban Forestry Program has six Regional Coordinators, whose job it is to serve those five regions. Two Coordinators share the Southeast Region.

Figure 2: Total number of communities that applied for a grant


## Observations:

The matching grant program is an effective tool the Urban Forestry Program has in attracting communities to its program. Thirty-five percent of the communities are considered actively involved in the program.

- A third of the communities applied for an urban forestry grant.
- Ninety-one percent of those who have ever applied, received at least one grant.


## Figure 3: Distribution of awarded grants by region



Regions

## Observations:

Communities in the South Central and North Regions are more likely to apply for, and receive grants.

NOTE: The discrepancy among regions regarding providing grants may effect issues relating to workloads for those Regional coordinators.

Figure 4: Awareness and participation in grant program by community size


Aware of Grant Program $\square$ Applied for Grant $\begin{aligned} & \text { Received Grant }\end{aligned}$

## Observations:

Community awareness of, and participation in the grant program is a function of community size.

- Larger communities are more aware of the program than small ones.
- Larger communities are more likely to apply and receive a grant.

Note: The program is likely to have the largest impact on smaller communities, but they do not have the knowledge or resources to take advantage of it.

Figure 5: Reasons not to apply for grant


## Observations:

Main reasons for not applying include: being unable to match the grant (32\%), tree management not being a priority (27\%), or the community believing they are too small to compete (24\%).

- Concerns vary by community size:
- A third (35\%) of communities of less than 1,000 people believed their communities were not large enough to compete for the grants.
- Smaller communities (communities of less than 5,000 people) are most likely to think they have enough trees.
- The largest communities believed the strategic plan requirements were too demanding (100\%).


## Figure 6: Evaluation of grant application process



## Observations:

About half (53\%) of the grant applicants believe the application is straightforward.
Appraisal varies by size of the community:

- Small communities are most critical of the application process. Interestingly, the largest communities are also concerned.
- Thirty-three percent of communities of less than 500 people and only $20 \%$ of communities with 500 to 999 people believe the application was straightforward. Thirty-seven percent of the largest communities found the application straightforward.
- About half of the communities with 500 to 999 people believe the cost estimate worksheet is too complicated, as well as a quarter of the largest communities that applied.
- Communities of all sizes expressed concern that the application was too demanding for smaller communities. [70\% of smaller communities to 13\% for the largest communities.]


## Figure 7: Evaluation of technical support



## Observation:

The vast majority of those who applied for grants believed they received the right amount of technical support from the Regional Coordinators. (97\%)

Respondents were also asked to comment. What follows are the comments volunteered by respondents in their questionnaires.

## Directly from the respondents:

She was always pleasant and helpful.
I called regularly and always received friendly helpful service.
Very friendly, courteous service.
He has been great so far!
I've always received excellent help.
Always friendly and willing to help.
Thank you very very much.

## Respondents rate reimbursement process of grant program

Respondents were asked to rate and then comment on their experiences with the grant reimbursement process. Comments all relate to their rating of the reimbursement process.

## Question:

$>$ How would you rate the record keeping required for the grant program? On a scale of 1 to 5, where 1 is very easy and 5 is very difficult and cumbersome?

## Observations:

Respondents rated the record keeping at a 3.2 out of 5 . There is no statistical distinction between community sizes.

Directly from the respondents:

## RATING 1-VERY EASY (7\%)

For an organized department these kinds of records should be kept regardless of grant requirements.

This year was easier than past years. In past years, the auditors were asking for documentation of other documentation!

Reimbursement paperwork should be altered to make it easier for communities who have not completed it previously.

## RATING 2-FAIRLY EASY (2\%)

The information required is easy to keep track of.

Very straightforward
All grants are difficult. We already make demands on our crew about keeping daily reports on the computer. Without that, it would be cumbersome.

## RATING 3-NOT EASY BUT NOT TOO DIFFICULT (52\%)

Wasn't too difficult. The hardest part was keeping track of volunteer and municipal workers' time.

## RATING 4 -DIFFICULT (23\%)

Only because no one was designated to maintain the records. The DNR grant coordinator was very helpful.

Overkill on establishing equipment, depreciation and identifying specific volunteers.

## RATING 5 -DIFFICULT AND CUMBERSOME (15\%)

Are you kidding? It's awful! The auditor denied our claim last year.

It's only because \{regional coordinator\} did tons of work and recalculations that I got my \$5 300 back. I'm terrified of the year's attempt to get $\$ 20000$ back.

It was a huge hassle! I worked in corporate America for years ... but most folks in a rural environment could not do this right.

Our village is small and all these tasks are done by volunteers and not paid staff who would be involved with the work on a regular basis.

It took over 100 pages to request a reimbursement for a couple thousand dollars.

## Suggestions by respondents on how to improve grant program

Respondents were given the opportunity to comment on how the grant program could be improved. This is a sample of comments categorized.

## Question:

> How could the grant program be improved?

## Notification of deadlines

Need regular notification of dates and deadlines for submission; otherwise it can easily slip by.

## Preparation for applicants

Have a DNR representative meet with each group that applies for a DNR grant and outline all of the requirements and paperwork that will need to be done during the reimbursement process.

There should be pre-application help to determine what the needs are and what the total costs are. For example, trees, equipment, total hours, etc.

## Streamlined application

Make it easier. Reward communities for work performed not paper work completed.

For a small community and the size of some grants, a simpler application should be considered.

Simplify the application \{but\} keep the matching dollar part so the municipality will keep track of their costs.

Streamline the application process.
Reduce and simplify the paperwork.
Streamline the reimbursement process by allowing computer confirmation of purchases from our finance dept. Allow more planting funds-more rating points-for communities with a management plan.

## Flexible grant limits

Lower limits might increase participation and serve to initiate those who have never attempted to receive a grant.

Lower limit should be increased. What can you do for $\$ 1000$ ?

Higher limit should be increased for special projects.

## Application flexibility

Do not require management plans to get small grants, or provide models for small cities that are easy to manage.

Give more, smaller grants for tree planting. Smaller communities need this.

## Requirement for returned checks

A lot of banks don't give back checks anymore, and you need that for reimbursement.

The DNR requires that I provide the checks, but if our bank doesn't provide that service, then it's a pain.

## Providing half the grant funds up front

To receive half of the grant right away to help finance the project and the rest at the year-end when the project is completed.

## Community budget year

It would be nice if grant was awarded in October and ran until \{the following\} October.

## Negative

We plant trees in the city of Pittsville for the people and to make our community look nice. Not by the point system or ruler the DNR is looking for. We will keep trying for your grant and maybe some day we will get it. Keep up the good work and keep the bigger city happy.

I think it works well.

## Figure 8: Reimbursement evaluation



## Observations:

For nearly two thirds (64\%) of those who received a grant, the reimbursement procedures were not much of a problem.

- Those who have problems, cite:
- Lacking required information
- Waiting to receive reimbursement check
- Unsure about what to submit.
- Other issues include:
- Complex bookkeeping
- Having to providing returned checks, when some banks no longer provide them
- Tracking volunteer hours (Volunteers often provided mulitiple services making dissection of those hours difficult)

Figure 9: Urban Forestry product awareness


## Observations:

A majority of communities are familiar with the newsletter and workshops.

- Smaller communities are also less likely to attend workshops. Two percent of the smallest communities versus $100 \%$ of the largest communities have attended the workshops and annual conferences.

Figure 10: Product awareness by community population


## Observation:

Product awareness is related to community size.

- Smaller communities are less aware of the Urban Forestry products available: a third of the smallest communities are familiar with the newsletter and $7 \%$ are familiar with the website, compared with $100 \%$ of the largest communities that are familiar with the newsletter and two thirds are familiar with the website.


## Figure 11: Product use by community population



## Observations:

Product use is related to community size.

- Communities are more likely to read the newsletter than use any other Urban Forestry product.
- Larger communities are more likely to make use of Urban Forestry products than smaller communities.


## Figure 12: Urban forestry product evaluation



## Observations:

- Respondents are satisfied with the urban forestry program products.
- Sixty-five percent of respondents who read the newsletter believe it is good to excellent.
- Sixty-three percent of respondents who have used the website believe it is good to excellent.
- Seventy-seven percent of respondents who have attended a workshop believe them to be good to excellent.
- Seventy-six of respondents who have attended an annual conference believe them to be good to excellent.

As positive as the feedback is, there is always room for improvement, as the next comment, provided by a survey respondent, suggests.

## Directly from the respondents:

Better speakers at our annual conferences. Topics seem to repeat every two years or $\{y o u\}$ have the same speakers. Also, more hands on demonstrations for tree care and dealing with the general public!

Figure 13: Reasons for contacting Regional Coordinator


The main reasons communities contact the Regional coordinators are to discuss the grant application (62\%), to inquire about resource material (55\%) and to learn about what other communities are doing with their urban forests (34\%).

## Figure 14: Profile of community needs



## tion:

$>$ We would like to know what community tree management activities you feel you need the most help with. If you were to receive assistance with your tree management program from the DNR, in the form of grants, consulting, instruction or training materials, which of the following tree management activities would be given the highest priority? Circle up to 7 of your most important needs.

## Observations:

Communities' highest priority is getting training for employees in tree management and care. In general, there is no statistical variation by community size.

## Other priorities include:

- Developing official support (22\%) is as low as $11 \%$ for the smallest communities and as much as $50 \%$ for the largest communities.
- Computerizing the tree inventory (20\%) [this is related to and increases by community size.]
- Developing a volunteer program (20\%)
- Developing training material (14\%)
- Developing a tree board (12\%)

Figure 15: Preference of assistance format


## Ques

## tion:

> What format would you prefer the assistance to take (rank 1-5, 1 being most preferred and 5 being least preferred). Use each number only once.

This graph shows the percent of respondents that ranked each assistance format as a 1 or a 2 (most preferred or preferred)

## Observations:

Most communities are interested in assistance in the form of a grant, but also want

- Personal consulting (47\%)
- Instructional workshops (44\%)
- Printed material (41\%)

Figure 16: Community tree manager profile


This graph shows the total percent of communities with someone to oversee tree management and the breakdown of the staff for that position.

## Observations:

- A majority of communities have someone who oversees tree management.
- Overall, $72 \%$ of all communities have someone to oversee their tree management, from $38 \%$ in the smallest communities to $100 \%$ in the largest communities.
- An urban forestry manager means many different things depending on the size of the community.

Communities use municipal workers ( $80 \%$ to $100 \%$ ) to oversee tree management.

- The larger communities do not use contractors or volunteers to oversee tree management.
- The Departments that manage the trees are the Department of Public Works (37\%) and the Department of Parks (28\%). The Parks Department may be a stand-alone Department or may be connected with other departments including Recreation, Roads, Forestry.

Figure 17: Grant recipients and tree management


## Observations:

Communities that have someone to oversee tree management are far more likely to apply for and receive a grant.

- Ninety-five percent of all grant recipients have someone to oversee tree management.
- The larger the community, the more likely it is that they will have someone to oversee urban forestry and receive a grant.


## Figure 18: Percentage of time spent on tree management activities



Note: This graph shows the percent of time spent on tree management activities by municipal workers who oversee tree management.

## Observation:

For example, communities of 5,000 to 10,000 people, $28 \%$ of the tree manager's time is spent actually dealing with or managing trees.

Average time spent on tree management is related to size of community. For most communities except for the largest, tree management is not a full-time position.

- Tree managers in smaller communities wear many hats and spend very little time actually on tree management.
- Larger communities have the resources to have full time tree management.

Figure 19: Municipal staffing for tree care


## Observations:

- A small minority of communities hire municipal workers to care for trees full-time.
- A total of 27 out of 412 communities (7\%) have permanent full-time employees to care for trees. The median number of permanent full-time employees for those communities is three. Milwaukee has 200 such employees.
- 220 communities (53\%) have permanent employees working part-time on tree care. The median number of permanent part-time employees for those communities is two. Fifty percent of the smallest communities have 1 part-time staff.
- 21 communities (5\%) have seasonal employees working full time on tree care. The median number of seasonal full-time employees for those communities is one. Communities with a population of less than a thousand don't have any seasonal workers for tree care.
- 89 communities (22\%) have seasonal employees working part-time on tree care. The median number of seasonal part-time employees for those communities is two.

Figure 20: Percent of communities with tree budgets


## Observations:

There is a direct linear relationship between community size and having a tree budget.

- Fifty-three percent of communities have budgets for tree management.
- Smaller communities are less likely to have a tree budget. (5\%)

Table 2: Size of community tree budgets

| Population | \# of communities |  | Minimum | Maximum | Median |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | responding | with budgets |  |  |  |
| Less than 500 | 78 | 4 | \$300 | \$68 000 |  |
| 500-999 | 86 | 21 | \$2 | \$15000 | \$2 000 |
| 1000-4999 | 151 | 90 | \$300 | \$102 038 | \$5 600 |
| 5000-9999 | 34 | 23 | \$750 | \$140 000 | \$25 000 |
| 10000-49999 | 44 | 36 | \$5 000 | \$586 000 | \$63 014 |
| 50000 or more | 10 | 10 | \$20 000 | \$11542903 | \$486000 |

## Question:

> What was the total tree management budget for 1999? Please include personnel, overhead, equipment, supplies, plant material and contract payments.

## Observations:

As community size increases so does the likelihood of budgeting for an urban forestry program.

The amount of money allocated to trees grows as size increases.
Note:
Given the maximum grant for the urban forestry program is $\$ 25,000$, it's clear that the program will have the most impact on smaller communities, those with a population of less than 50,000 people. In these communities, such a grant could well equal the overall forestry budget.

Figure 21: Source of tree budget funds


## Question:

$>$ How are tree care funds derived?

## Observations:

The main source for community tree budgets is their general fund (98\%).

- Other sources include grants (33\%) and donations (30\%).

Figure 22: Volunteers and contractors for tree care

$\square$ Volunteers $\quad$ Contractors

## Observations:

Communities rely extensively on contractors for tree care. Twenty-eight percent of communities use volunteers and $54 \%$ use contractors for their tree care.

- As community size increases to 10,000 people, so does the use of hired contractors to care for trees.
- The largest communities rely less heavily on contractors and volunteers for tree care, as their budgets allow for municipal employees to fill those roles.

Table 3: Mean percentage of operations performed by volunteers

| Population | Planting | Tree <br> Maintenance | Management <br> Policy |  <br> Education | Fund <br> Raising |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Less than 500 | $69 \%$ | $57 \%$ | - | $21 \%$ | $12 \%$ |
| 500 to 999 | $63 \%$ | $33 \%$ | $20 \%$ | $19 \%$ | $31 \%$ |
| 1000 to 4999 | $29 \%$ | $19 \%$ | $22 \%$ | $19 \%$ | $13 \%$ |
| 5000 to 9999 | $35 \%$ | $4 \%$ | $10 \%$ | $10 \%$ | $1 \%$ |
| 10000 to 49 999 | $21 \%$ | $2 \%$ | $13 \%$ | $14 \%$ | $2 \%$ |
| More than 50 000 | $18 \%$ | - | - | - | $28 \%$ |
| Total | $43 \%$ | $26 \%$ | $15 \%$ | $18 \%$ | $15 \%$ |

## Question:

$>$ About what percent of the following tree operations in your community are performed by volunteers? Give us your best estimate.

## Observations:

By and large communities use volunteers primarily to plant trees.

- Tree planting is a popular volunteer activity followed by tree maintenance
- Need for volunteers decreases as communities and budgets increase in size.
- In the largest communities, volunteers are used mainly for fund raising.

Table 4: Mean percentage of operations performed by contractors

| Population | Planting | Tree <br> Maintenance | Removal | Management <br> Policy |
| :--- | :---: | :---: | :---: | :---: |
| Less than 500 | $7 \%$ | $21 \%$ | $72 \%$ | - |
| 500 to 999 | $17 \%$ | $24 \%$ | $56 \%$ | $2 \%$ |
| 1000 to 4999 | $24 \%$ | $28 \%$ | $54 \%$ | $6 \%$ |
| 5000 to 9999 | $42 \%$ | $35 \%$ | $51 \%$ | $9 \%$ |
| 10000 to 49 999 | $22 \%$ | $24 \%$ | $40 \%$ | $7 \%$ |
| More than 50 000 | $6 \%$ | $5 \%$ | $23 \%$ | - |
| Total | $20 \%$ | $25 \%$ | $55 \%$ | $4 \%$ |

## Question:

> What percent of each of the following operations do contractors perform? Observations:

All communities use contractors primarily for stump removal and tree maintenance.

- The largest communities use contractors for the least number of operations because of budgets and municipal staff available for such operations.

Figure 23: Tree inventories by community size


## Question:

> Does your community have a tree inventory: an inventory or list of public trees in your community?

## Observations:

Smaller communities are less likely to have tree inventories.

- Nearly a quarter (23\%) of all communities have a tree inventory.
- The very largest are less likely than mid-size communities to have a tree inventory

Figure 24: Relationship between grants and tree inventories


## Observations:

The Urban Forestry Program encourages communities to establish a tree inventory and make it a priority for grants.

- Nearly all (87\%) communities that have received grants have tree inventories.

Figure 25 :Tree City USA communities


## Observations:

Smaller communities are less likely to be Tree City U.S.A. communities.

- Thirty-five percent of Wisconsin communities are Tree City U.S.A communities.
- Seventy-six percent of Tree City U.S.A. communities received grants and 55\% of those who received grants were Tree City S.S.A. communities.
- Of those communities that were not Tree City U.S.A. communities, 38\% of them were not aware of the program.

Communities that are not Tree City U.S.A. communities fulfill the four standards to become a Tree City U.S.A. community as follows:

- Thirty-seven percent have a tree board, department or committee.
- Thirty-eight percent have ordinances relating to trees.
- Nineteen percent have an annual tree budget of $\$ 2$ per capita.
- Seven percent have an Arbor Day proclamation.

Figure 26:Tree City USA community by region


## Observations:

Northeast Region has the most Tree City USA communities.

Figure 27: Further contact requested


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\begin{gathered}
\text { Appendix A } \\
\text { Non participant } \\
\text { Profile }
\end{gathered}
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## Table of contents

Table of contents ..... 2
Principal findings ..... 3
Non-participant breakdown ..... 6
Tree managers ..... 9
Budgets ..... 10
Tree management ..... 12
Volunteers ..... 17
Contractors ..... 19
Operations profile ..... 20
Tree City USA ..... 24
Urban Forestry grant program ..... 26
DNR assistance ..... 29
DNR Urban Forestry products ..... 31
Community needs ..... 32

## Principal findings

- Two thirds of survey respondents are considered non-participants.(63\% )
- The majority of non-participant communities (93\%) have populations of less than 5,000.
- Nearly two thirds of non-participants have someone to oversee the community tree care but average less than $10 \%$ of their time on tree care.
- Only one-third of non-participants have tree budgets, most of their funding coming from the general fund.
- Thirty-eight percent of non-participant communities have organized tree management groups to establish tree management policy.
- Only a third of non-participants have ordinances in place that regulate tree management on public or private property.
- Less than one-fifth of non-participant communities use volunteers. Volunteers are used primarily for tree planting and tree maintenance.
- Two-fifths use contractors, who are used primarily for tree removal.
- Virtually no non-participant communities have tree inventories.
- Ten percent have tree planting records for 1998.
- Four percent of non-participant communities have tree nurseries.
- Forty-two percent of non-participants are aware of Tree City USA, but do not participate.
- Over half are aware of the grant program. Only 3\% ever applied and none has ever received a grant.
- The main reason for not applying, is their belief that they are unable to match the grant and/or that trees are not a priority.
- Only nine percent have ever received assistance from DNR staff, mostly dealing with the grant application.
- The newsletter is most familiar to (46\%) and used by (29\%) non-participant communities. The website is least familiar (12\%) and least used (4\%).
- The three priorities for non-participant communities are tree planting, removing dead and hazardous trees and tree pruning.
- Non-participants obtain most of their information or assistance from tree or landscape companies (32\%) or county extension (27\%).


## Introduction

For the purpose of this report, a non-participant community is one that has never received an Urban Forestry grant and do not participate in Tree City U.S.A.

Of the 412 survey respondents, 257 are considered non-participants and 154 are considered participants. One respondent did not answer the needed questions for this evaluation.

The definition of a participant community is one that has either received an Urban Forestry grant and/or participates in Tree City USA.

There are some comparisons, in this report of non-participant and participant communities.

## Non-participant breakdown

Figure 1: Breakdown of survey respondents


## Observations:

Survey results show that nearly two-thirds (63\%) of respondents are non-participant communities. A third ( $37 \%$ ) of the respondents are considered participant communities.

Figure 2: Profile of non-participants by region


## Observations:

Of those communities who responded, $62 \%$ are identified as non-participants in the Urban Forestry Program.

Figure 3: Profile of non-participants by community size


## Observations:

Of the survey respondents, 93\% of non-participant communities come from communities of less than 5,000 people.

Tree managers
Figure 4: Tree managers


## Observation:

Almost two thirds of non-participant communities have someone to oversee tree management in the community.

- Non-participants are 34\% less likely than participants to have someone oversee tree management.

Mean percent of municipal employee who oversee tree management

|  | Non-Participant | Participant |
| :--- | :---: | :--- |
| First overseer | 8.9 | 26.3 |
| Second overseer | 15.5 | 24.8 |
| Third overseer | 20.0 | 24.9 |

## Question:

How many paid municipal workers do you have working on tree management?
Mean number of municipal employees working on tree management

|  | Non-participant | Participant |
| :--- | :--- | :--- |
| Permanent, working full-time | 0.04 | 2.02 |
| Permanent, working part-time | 0.74 | 3.02 |
| Seasonal, working full-time | 0.02 | 0.74 |
| Seasonal, working part-time | 0.21 | 0.92 |

## Observations:

Non-participants are less likely to employ municipal workers to work on tree management than participant communities.

## Budgets

Figure 5: Tree budgets


## Observations:

The majority of non-participant communities (70\%) do not allocate funds for trees.

- Non-participant communities are 60\% less likely to have a tree budget than participant communities.

Figure 6: Source of tree budget funds for non partipants


## Observations:

For those with a tree budget, $97 \%$ of it comes from the general fund.

- Other sources of income include:

Developer fees, Alliant Energy grants, Capital Improvement grants, Wisconsin Public Services grants.

## Budget breakdown

|  | Mean budget | Minimum | Maximum | Median |
| :--- | :---: | :---: | :---: | :---: |
| Non-participant | 11,956 | 0 | 389,833 | 2,000 |
| Participant | 176,557 | 1,500 | $11,542,903$ | 26,000 |

Figure 7: Budget projection for the year 2000


Note: Only 63 non-participants and 125 participants responded to this question

## Question:

Does your community plan to have a bigger tree budget, a smaller tree budget or the same tree budget for 2000?

## Observations:

For non-participants with budgets, $81 \%$ believe their budgets will remain the same ( $62 \%$ ) or increase (19\%). Eighty-six percent of participants believe their budgets will remain the same or increase.

- Only a small minority of non-participants (3\%) will decrease their budgets for the year 2000 versus $6 \%$ of participants.


## Tree management

Figure 8 : Non-participant tree management profile


## Observations:

A total of $38 \%$ of non-participant communities have organized tree management groups to establish tree management policy.

- Twenty-three percent of all non-participant communities have City Councils or Village Board Committees, 16\% have Parks Boards and 13\% have Parks and Recreation Departments.
- Other tree management groups include: Board of Public Works, Department of Public Works, Highway Committee, Parks and Recreation Committee and Public Works Committee.

Figure 9: Management plans


## Observations:

The majority of non-participant communities ( $94 \%$ ) do not have tree management plans, compared with $43 \%$ of participant communities.

- Three non-participant communities (1\%) have tree/urban forest management plans dating from 1995 to 1997. Seventy-three participant communities (47\%) have such plans dating from 1976 to 1999.
- Thirty-two participant communities (21\%) have urban forestry strategic plans dating from1985 to 1999.
- Eighteen non-participant communities (7\%) have land use management plans, dating from 1981 to 1999. Thirty-three participant communities ( $21 \%$ ) have such plans dating from 1992 to 1999.

Figure 10: Tree ordinances


## Question:

Do you have community ordinances related to trees? When we say ordinances we mean stand alone ordinances or provisions that regulate the management of trees on public or private property.

## Observations:

About one-third of non-participant communities have tree ordinances compared with four-fifths of participant communities.

Figure 11: Non-participant community ordinances


## Observations:

Non-participants have ordinances relating to regulation of removal of dead or diseased trees ( $31 \%$ ), regulation of species which may or may not be planted on the street ( $25 \%$ ) and abatement of hazardous or public nuisances (22\%).

- Communities do not have ordinances relating to the identification of formula for determining monetary value or licensing of private tree care firms.

Figure 12: Responsibility for trees in municipal right of way of nonparticipant communities


Note: only 96 of the 257 non-participants responded to this question.
Question:
Who in your community is responsible for maintaining trees in municipal rights of way, for example trees between sidewalk and curb or alley trees?

## Observation:

Municipalities of non-participant communities are $17 \%$ less likely to be responsible for right of way trees than participant communities.

Non-participant communities are also more likely to have the abutting property owner be responsible for maintaining municipal rights of way.

## Volunteers

Figure 13: Use volunteers for tree care

$\square$ Yes $\square$ No ■Don't know

## Question:

Does your community use volunteers (individuals or groups not paid for providing services) for tree care on public property?

## Observations:

Forty-four non-participant communities (18\%) use volunteers for tree care versus 64 (40\%) of participant communities.

Those communities that use volunteers have the following organizations to tree operations or management.

| Organization | Non-participant | Participants |
| :--- | :--- | :--- |
| Individual residents | $50 \%$ | $36 \%$ |
| City council or village board committee | $39 \%$ | $32 \%$ |
| Service organization | $30 \%$ | $30 \%$ |
| Park board | $30 \%$ | $29 \%$ |
| Business donation | $24 \%$ | $24 \%$ |
| School group | $15 \%$ | $42 \%$ |
| Beautification committee | $13 \%$ | $26 \%$ |
| Tree board | $4 \%$ | $47 \%$ |
| Neighborhood association | $4 \%$ | $11 \%$ |

## Question:

About what percent of the following tree operations in your community, are performed by volunteers? Give us your best estimate.

The mean percent of the following operations are performed by volunteers:

| Operation | Non-participants | Participants |
| :--- | :--- | :--- |
| Planting | $56 \%$ | $39 \%$ |
| Tree maintenance | $46 \%$ | $17 \%$ |
| Fund raising | $42 \%$ | $17 \%$ |
| Awareness and education | $29 \%$ | $28 \%$ |
| Management policy | $18 \%$ | $33 \%$ |

## Observations:

Non-participant and participant communities alike use volunteers mostly for their planting needs.

- Non-participants use volunteers for only 18\% of their management policy, where participant communities use them on average for $33 \%$ of their management policy needs.
- Both non-participant and participant communities use volunteers for about 30\% of their awareness and education needs.


## Contractors

Figure 14: Use paid contractors for tree care activities


## Observations:

The majority of non-participant communities (148 communities or 59\%) do not use paid contractors for their tree care activities.

## Question:

What percent of each of the following operations do contractors perform?
The mean percent of the following operations are performed contractors:

| Operation | Non-participant | Participant |
| :--- | :--- | :--- |
| Removal | $65 \%$ | $53 \%$ |
| Tree maintenance | $42 \%$ | $36 \%$ |
| Planting | $42 \%$ | $41 \%$ |
| Management policy | $7 \%$ | $19 \%$ |

## Observations:

Both Non-participants and participants use contractors for most of their tree removal needs.

- Communities use contractors for about $40 \%$ of their planting needs.
- Non-participant communities use contractors for $12 \%$ of their management policy needs than participant communities.


## Operations profile

## Tree inventories



## Observations:

Five (2\%) non-participant communities and 87 (56\%) participant communities have tree inventories.

- Two non-participant communities (just less than 1\%) and 73 participant communities have computerized inventories.


## Non-participants:

- Inventories are updated yearly and every five years.
- Neither computerized tree inventory is linked to GIS.


## Participants:

- One community updates their inventory daily but most update it monthly, yearly or every 5 years.
- Seven communities have their tree inventories linked to GIS.

Figure 15: Communities with 1998 tree planting records


## Observations:

Ninety percent of non-participant communities do not keep tree planting records. Twenty-five (10\%) non-participant communities keep tree planting records.

The following table shows the mean number of trees planted in 1998, for those communities with records.

| Activity | Non- <br> Participant | Mean number of <br> trees |
| :--- | :--- | :---: |
| Trees planted on municipal property in <br> 1998 | 303.36 | 200.95 |
| Trees removed from municipal property in <br> 1998 | 44.46 | 108.75 |
| Trees pruned on municipal property in <br> 1998 | 279.48 | $1,187.37$ |

Figure 16: Municipal tree pruning


Note: This graph is based on 28 non-participant responses and 111 participant responses.

## Observations:

Non-participant communities are more likely to prune only as needed.

- Six communities ( $21 \%$ ) out of the 28 non-participants that responded, prune their trees on a schedule compared with 58 (52\%) participant communities.
- Twenty-three non-participants (82\%) prune only as needed compared with 76 participant communities (69\%).
- Four communities (14\%) do not prune at all compared with three participant communities (3\%).

Figure 17: Community nurseries


| Percent of planting needs | Non-participant | Participant |
| :--- | :---: | :--- |
| satisfied by nursery | 0 | $21 \%$ |
| $\mathbf{0 \%}$ | $03 \%$ | $42 \%$ |
| $\mathbf{1 - 2 5 \%}$ | 0 | $17 \%$ |
| $\mathbf{2 6 - 5 0 \%}$ | 0 | $13 \%$ |
| $\mathbf{5 1 - 7 5 \%}$ | 0 | $8 \%$ |
| $\mathbf{7 6 - 9 9 \%}$ | $38 \%$ | 0 |
| $\mathbf{1 0 0 \%}$ |  |  |

## Observations:

Four percent (4\%) of non-participant communities, have nurseries compared with $16 \%$ (24) of participant communities.

- Five use their nurseries for $1-25 \%$ of their planting needs.
- Three use their nurseries for $100 \%$ of their planting needs.
- One respondent did not supply this information.


## Figure 18: Tree City USA awareness and participation



Note: for the purpose of this report- a non-participant community has not received a DNR Urban Forestry grant nor participated in Tree City USA.

## Observations:

Two fifths of non-participants are aware of Tree City USA, but do not participate.

- Participant communities are aware of the program and just over half choose to participate.

Figure 19: Standards to qualify for Tree City USA recognition


## Observations:

About a quarter of all non-participants have tree boards and ordinances relating to trees, but are less likely to have tree budgets of $\$ 2$ per capita and even less likely to celebrate Arbor Day.

## Urban Forestry grant program

Figure 20: Grant program awareness


Note: For the purpose of this report- a non-participant community has not received a DNR Urban Forestry grant nor participated in Tree City USA

## Observations:

Over half of non-participant communities are aware of the grant program, however, only three percent applied.

Almost all participant communities are aware of the program and most also apply.

Figure 21: Reasons for not applying


## Observations:

The main reason for not applying for the grant is that they do not believe they can match the grant.

- Other reasons include: tree management not being a priority, the community being too small to compete, and not having enough information to decide.

Eight non-participant communities applied for grants.

- Two communities said the application was straightforward.
- Two communities said the application helped them focus.
- Two communities said the application was too demanding for small communities.
- Five of the eight communities said they received the right amount of technical support from the DNR staff.

Figure 22: Receiving assistance from DNR staff


The following tables shows the percent of contact frequency:

|  | Non-Participant | Participant |
| :--- | :---: | :---: |
| Once | $57 \%$ | $14 \%$ |
| Occasionally | $43 \%$ | $67 \%$ |
| Frequently | $0 \%$ | $14 \%$ |
| Regularly | $0 \%$ | $5 \%$ |

## Observations:

Only 23 non-participants (9\%) have ever received assistance from a DNR Regional Urban Forestry Coordinator, compared with 109 participant communities (71\%).

- For the majority of non-participants, contact was made only once.

Figure 23: Reasons for receiving assistance


## Observations:

The main reason non-participants requested assistance was for the grant application (44\%).

- Other main reasons include:

Diseased tree questions (28\%)
Resource material (28\%)
Parks and street tree management (24\%)
Tree identification and selection (24\%)

- The average rating for assistance is 7 out of 10 , where 10 is excellent.


## DNR Urban Forestry products

Figure 24: Urban Forestry product awareness


## Observations:

Non-participant communities are less than half as aware as participant communities of the DNR Urban Forestry products and services available.

Figure 25: Urban Forestry product use


## Observations:

Non-participants are far less likely to make use of DNR Urban Forestry products and services.

- Both non-participants and participants are more likely to have read the newsletter than use any other service. (29\% for non-participants and $81 \%$ for participants)


## Community needs

Figure 26: Non-participant community "needs" priorities


## Observations:

The three main priorities for non-participant communities are tree planting (35\%), removing dead and hazardous trees (32\%), and tree pruning (30\%).

Figure 27: Preferred Assistance options


## Preferred and Most Preferred Assistance Options

## Question:

> What format would you prefer the assistance to take. (rank 1-5, 1 being most preferred and 5 being the least preferred). Use each number only once.

Note: This graph shows the percent of non-participants who ranked these options as a 1 (most preferred) or a 2 (preferred)

## Observations:

By far, the majority of non-participant communities prefer assistance in the form of grants.

- Two fifths of non-participants want their assistance to come in the form of printed material versus half of participants who want their assistance in the form of printed material.
- Least preferred for non-participants, with 9\%, was the state conference. Participants preferred the state conference the least with $7 \%$.

Figure 28:Where non-participants obtain information or assistance


## Observations:

The main sources of information and assistance for non-participant communities are the tree and landscape companies ( $32 \%$ ), the County Extension ( $27 \%$ ) and nurseries (18\%).

## Appendix B

## Comparing results: 1992 and 1999 Urban Forestry surveys

## Table of Contents

Principal findings ..... 3
Community statistics ..... 5
Inventories ..... 6
Tree boards ..... 7
Tree management plans ..... 8
Tree ordinances ..... 9
Tree budgets ..... 10
Tree managers ..... 12
Contractors ..... 13
Volunteers ..... 14
Tree planting, removal and pruning trends ..... 15
Community nurseries ..... 16

## Principal findings

- The 1999 achieved a 69\% return rate for analysis versus a $33 \%$ in 1992 .
- Tree inventories have doubled, from 11\% in 1992 to 23\% in 1999.
- Community tree boards have risen slightly from 54\% to 57\%.
- There has been a decrease in community tree management plans, from $24 \%$ to 23\%.
- Community tree ordinances have increased from 48\% in 1992 to 53\% in 1999.
- Contractors are being used more than in 1992, as are volunteers.
- Tree planting, removal and pruning trends have increased dramatically since 1992.
- Community nurseries have increased from 2\% in 1992 to $7 \%$ in 1999.

Respondents
Figure 1: Survey respondents by community size


Table 1: Community size

| Year | Total | Return rate | Minimum | Maximum | Mean | Median |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 9 9 2}$ | 193 | $33 \%$ | 89 | 192,859 | 8,324 | 2,001 |
| 1999 | 412 | $69 \%$ | 4 | 628,503 | 7,116 | 1,500 |

A higher return rate resulted from multiple contacts with survey recipients:

- An advance letter
- A cover letter with the survey
- A thank you/reminder postcard
- A second cover letter with a duplicate survey
- A telephone call


## Community statistics

## Miles of municipally maintained streets

|  | Mean | Minimum | Maximum | Median |
| :--- | :--- | :--- | :---: | :--- |
| $\mathbf{1 9 9 2}$ | 40.6 | 1.0 | 592 | 13.5 |
| 1999 | 38.94 | 0.0 | 1,414 | 12.0 |

Acres of municipally managed parks

|  | Mean | Minimum | Maximum | Median |
| ---: | ---: | :--- | :--- | :--- |
| $\mathbf{1 9 9 2}$ | 103.8 | 0.0 | 1,882 | 22 |
| 1999 | 88.5 | 0.0 | 5,700 | 20.6 |

Acres of municipal natural areas or green space

| Mean |  |  |  |  |
| :--- | :--- | :--- | :---: | :--- |
| 1992 | 145.5 | 0.0 | 4,500 | 24 |
| 1999 | 177.1 | 0.0 | 16,000 | 15 |

Acres of other planted municipal properties

|  | Mean | Minimum | Maximum | Median |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 9 9 2}$ | 44.22 | 0.0 | 1,735 | 10 |
| 1999 | 38.19 | 0.0 | 1,000 | 10 |

Inventories

## Table 2: Total percent of communities with tree inventories

| Tree inventories | 1992 | 1999 |
| :--- | :--- | :--- |
| Yes | $11 \%$ | $23 \%$ |
| No | $88 \%$ | $77 \%$ |

Figure 2: Tree inventories by community size


Observations:

- Twice as many communities from 1992 have tree inventories.
- Smaller communities, both in 1992 and 1999 are less likely to have tree inventories.


## Tree boards

## Table 3: Total percent of communities with tree boards

| Tree Boards | 1992 | 1999 |
| :--- | :--- | :--- |
| Yes | $54 \%$ | $57 \%$ |
| No | $46 \%$ | $43 \%$ |

Figure 3: Communities with tree boards by community size


## Observations:

- The number of communities with tree boards has only slightly increase (4\%) to 57\%.
- In some community-size categories, the number of communities with tree boards has decreased, for example: communities with 1500 to 3000 people. In 1992 70\% had tree boards, dropping by $7 \%$ in 1999 to $63 \%$.


## Tree management plans

Table 4: Total percent of communities with tree management plans

| Tree Plans | 1992 | 1999 |
| :--- | :--- | :--- |
| Yes | $24 \%$ | $23 \%$ |
| No | $72 \%$ | $77 \%$ |
| Don't know | $4 \%$ | - |

Figure 4: Communities with tree management plans by community size


## Observations:

- The overall number of communities with management plans has dropped slightly (by $1 \%$ ) to $23 \%$.
- The largest communities had the most dramatic drop, from $75 \%$ of the largest communities having a management plan in 1992, to $20 \%$ in 1999.


## Tree ordinances

Table 4: Total percent of communities with tree ordinances

| Tree ordinances | 1992 | 1999 |
| :--- | :--- | :--- |
| Yes | $48 \%$ | $53 \%$ |
| No | $47 \%$ | $47 \%$ |
| Don't know | $5 \%$ | - |

Figure 5: Tree ordinances by community size


## Observations:

- There was a slight increase from 1992 to 1999 of communities with tree ordinances.
- However, some community size categories saw substantial drops. In 1992,65\% communities with 1,000 to 1,500 people had tree ordinances, which dropped $10 \%$ to $55 \%$ in 1999. The same is true for communities with populations of 20,000 to 50,000 , which had a drop of $21 \%$.


## Tree budgets

Table 6: Total percent of communities with tree budgets

| Tree budgets | 1992 | 1999 |
| :--- | :--- | :--- |
| Yes | $55 \%$ | $53 \%$ |
| No | $44 \%$ | $46 \%$ |
| Don't know | $1 \%$ | - |

Figure 6: Tree budgets by community size


Community Population

## Observations:

- Overall, there was a slight increase of communities with tree budgets from 1992 to 1999.
- Communities with populations between 3,000 and 50,000 had a decrease in the number of community tree budgets.

Table 7: Budget trends

|  | Respondents | Mean | Minimum | Maximum | Median |
| :--- | :--- | ---: | :--- | ---: | ---: |
| $\mathbf{1 9 8 9}$ | 106 | 56,304 | 0 | $1,365,630$ | 3,500 |
| $\mathbf{1 9 9 0}$ | 112 | 57,113 | 0 | $1,413,760$ | 4,500 |
| $\mathbf{1 9 9 1}$ | 112 | 59,079 | 0 | $1,412,680$ | 6,000 |
| $\mathbf{1 9 9 9}$ | $\mathbf{1 8 5}$ | 120,503 | 0 | $11,542,903$ | 12,500 |

Figure 7: Mean budget spending distribution


Activities

## Observations:

- Tree budgets have increased.
- The general distribution of budgets spending remains similar to 1992 distribution with an increase in the average spending on tree maintenance.


## Tree managers

Table 8: Total percent of communities with tree managers

| Tree managers | 1992 | 1999 |
| :--- | :--- | :--- |
| Yes | $75 \%$ | $72 \%$ |
| No | $25 \%$ | $28 \%$ |

Figure 8: Tree managers by community size


## Contractors

Figure 9: Operations performed by contractors


## Note:

In 1992, "other" category included: stump-grinding, shrubs and flowers, transplanting, inoculation and pruning.

In 1999, "other" includes management policy only.

## Observation:

The use of contractors for tree care operations has increased since 1992.

## Volunteers

Figure 10: Operations performed by volunteers


Note:
For1992, "other" included school planting or was unspecified.
For 1999 "other includes "Awareness and Education" only
Observations:
The use of volunteers for planting has more than doubled since 1992. (20\%-43\%)
The use of volunteers for maintenance has more than tripled since 1992. (7\%-26\%)

## Tree planting, removal and pruning trends

## Table 9: Tree planting trends

| Year | Total <br> respondents | Total number <br> of trees <br> planted | Mean | Minimum | Maximum | Median |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1989 | 168 | 19,035 | 113.3 | - | 3,290 | 11 |
| 1990 | 175 | 19,483 | 111.3 | - | 2,968 | 10 |
| 1991 | 178 | 24,526 | 137.8 | - | 2,822 | 12 |
| 1998 | 134 | 30,000 | 222.0 | - | 5,000 | 70 |

Table 10: Tree removal trends

| Year | Total <br> respondents | Total number <br> of trees <br> removed | Mean | Minimum | Maximum | Median |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| 1989 | 155 | 8,323 | 53.7 | - | 1,800 | 10 |
| 1990 | 161 | 8,693 | 54.0 | - | 1,500 | 6 |
| 1991 | 174 | 8,354 | 48.8 | - | 2,100 | 6 |
| 1998 | 128 | 12,377 | 96.69 | - | 2,860 | 25 |

Table 11: Tree pruning trends

| Year | Total <br> respondents | Total number <br> of trees pruned | Mean | Minimum | Maximum | Median |
| :--- | :--- | :---: | :---: | :--- | ---: | :--- |
| 1989 | 144 | 51,948 | 360.8 | - | 6,000 | 20 |
| 1990 | 150 | 66,252 | 441.7 | - | 17,500 | 22 |
| 1991 | 161 | 62,377 | 387.4 | - | 7,500 | 25 |
| 1998 | 124 | 126,352 | $1,018.97$ | - | 64,791 | 100 |

Observations:
In general, communities are planting, removing and pruning more trees.

## Community nurseries

Table 12: Total percent of community nurseries

| Tree Nurseries | 1992 | 1999 |
| :--- | :---: | :--- |
| Yes | $7 \%$ | $9 \%$ |
| No | $93 \%$ | $91 \%$ |

Figure 11: Community nurseries by community size


Observations:

- There was a slight increase ( $2 \%$ ) of respondents that have community nurseries.
- For the largest communities, the number dropped by over $50 \%$ to $20 \%$ with community nurseries.

