

# Trees for Neighborhoods Pre- & Post-Planting Workshop Survey



## Purpose

The City of Seattle's Trees for Neighborhoods project seeks to grow Seattle's urban forest through residential tree planting by removing planting barriers for residents. Through Trees For Neighborhoods, residents gain access to high quality trees, information about proper planting and care, and technical assistance with tree selection and permitting. When residents participate in Trees for Neighborhoods, they receive up to four free trees for their yard or planting strip, mulch, a water bag, and are required to attend a planting and care workshop. Trees for Neighborhoods stresses proper tree planting and follow-up tree care to ensure that the trees we plant get the care they need to thrive.

The purpose of this pre/post survey was to qualitatively measure participants' knowledge of basic tree planting and care before and after attending a Trees for Neighborhoods workshop. The simple four question survey served two purposes: 1) to assess the effectiveness of the workshops and 2) to reinforce the important tree planting and care concepts participants learned at workshops.

## Methods

We selected a pre- then post-survey design because it can be used to assess respondents' self-reported changes in knowledge. The pre- and post-workshop surveys included the same four questions to assess participants' knowledge of proper tree planting and care. Survey questions were multiple choice and participants were instructed to choose the best answer. While each survey question included an "opt-out" choice in the form of "Don't know", it is possible that many respondents still tried to guess. This limits the overall accuracy of the data and is a source of bias.



The pre-workshop survey was administered in-person at check-in before participants attended a tree planting workshop in fall of 2014. The post-workshop survey was sent by email the week following the workshop, through a Survey Monkey link. Since participants were encouraged to take the pre-workshop survey in person, we saw a higher response rate than the follow-up email survey.

- 387 Pre-Workshop Survey Responses – 90% response rate
- 216 Post-Workshop Survey Responses – 50% response rate

## Results

Overall, there was a 39.7% increase in survey scores between the pre- and post-workshop surveys, indicating that participants learned something new about proper planting and care by attending a workshop.

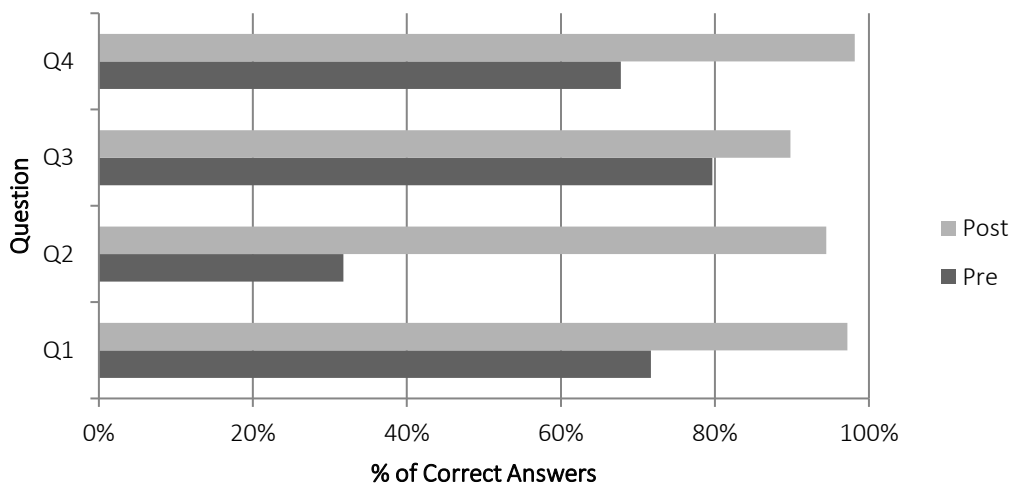
The largest self-reported knowledge improvement was in question 2, which asked participants what they should do before planting. Before attending a planting workshop, just 31.7% of participants answered this question correctly. In the follow-up survey, 94.4% of participants correctly answered, a 197% increase. In the pre-workshop survey, 55% of respondents answered that before planting it is most important to loosen all the soil at the bottom of the planting hole. This is a common misconception; loosening the soil can cause the tree to sink too deeply, burying the trunk and leading to rot. Workshop leaders stressed the

importance of not burying the tree too deeply and to avoid loosening all the soil at the bottom of the hole. On the post-workshop survey, only 6% of respondents selected this incorrect answer.

### Pre- and Post-Workshop Survey Answers

Question	Pre-Workshop (% correct)	Post-Workshop (% correct)	Percent Change
<b>Q1:</b> A proper planting hole should be...	71.69%	97.22%	+ 35.61%
<b>Q2:</b> Before planting, you should...	31.76%	94.44%	+ 197.36%
<b>Q3:</b> What is the most effective method of watering?	79.68%	89.8%	+ 12.7%
<b>Q4:</b> What is the most beneficial thing you can do for your young tree, besides watering?	67.8%	98.15%	+ 44.69%
<b>Average Total Score (out of 100%)</b>	68%	95%	

### Percentage of Correct Answers Pre and Post Workshop



Participants who indicated they had previously participated in the Trees for Neighborhoods program scored 24 percentage points higher in the pre-workshop survey than 2014 participants who had not participated in the past.

*Have you received trees through Trees for Neighborhoods before? (pre-workshop survey only)*

Response	Count	Average Survey Score
No	266	64%
Yes	112	80%
Don't Know	3	0%
No Response	6	-

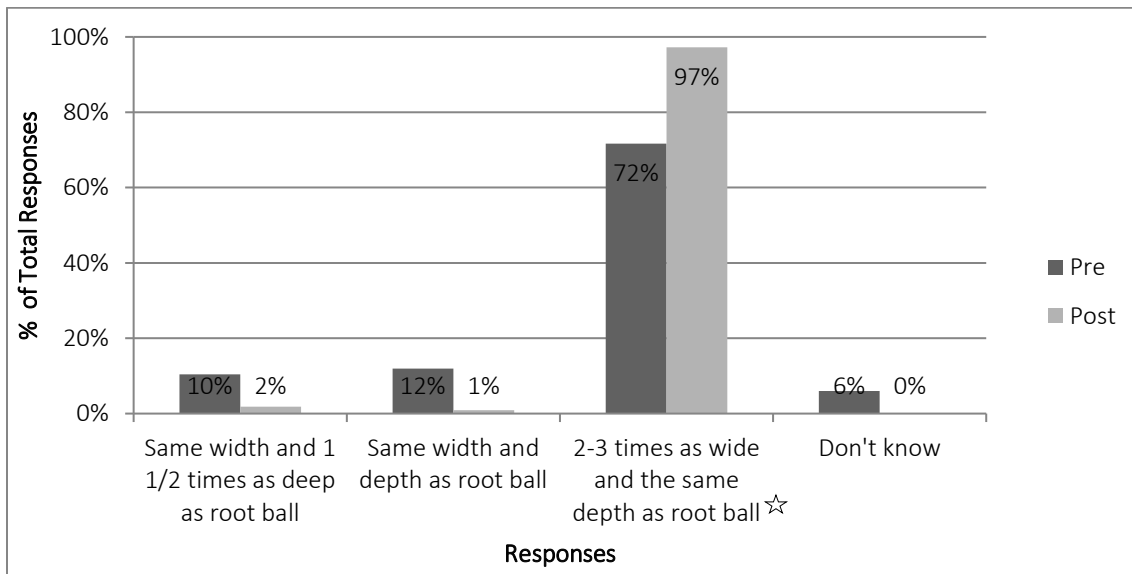
There was no significant difference in scores between participants who characterized their tree planting knowledge as little to none, confident, or landscape professional in either the pre- or post-workshop survey. The small number of respondents who identified themselves as landscape professionals or Master Gardeners did score higher on average in both the pre and post surveys, however.

How would you characterize your tree planting knowledge?

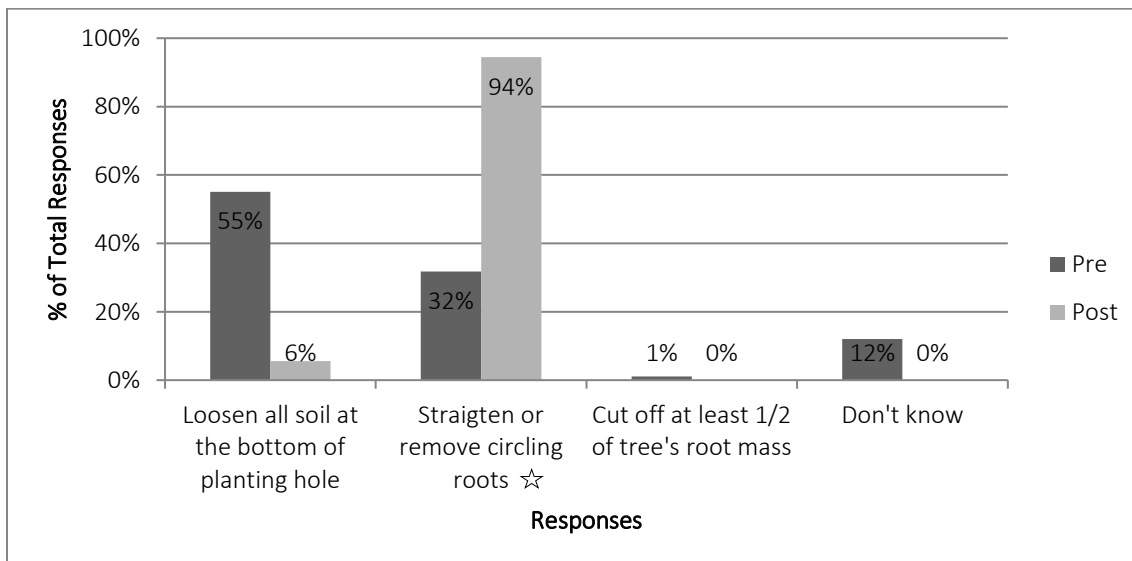
Tree Planting Knowledge	Pre-Workshop		Post-Workshop	
Response	Count	Average Score	Count	Average Score
Little to none	224	68%	112	94%
Confident in my knowledge	147	69%	94	95%
Landscape professional	11	72%	10	100%
No Response	5	50%	0	-

Pre- & Post- Workshop Survey Results by Question

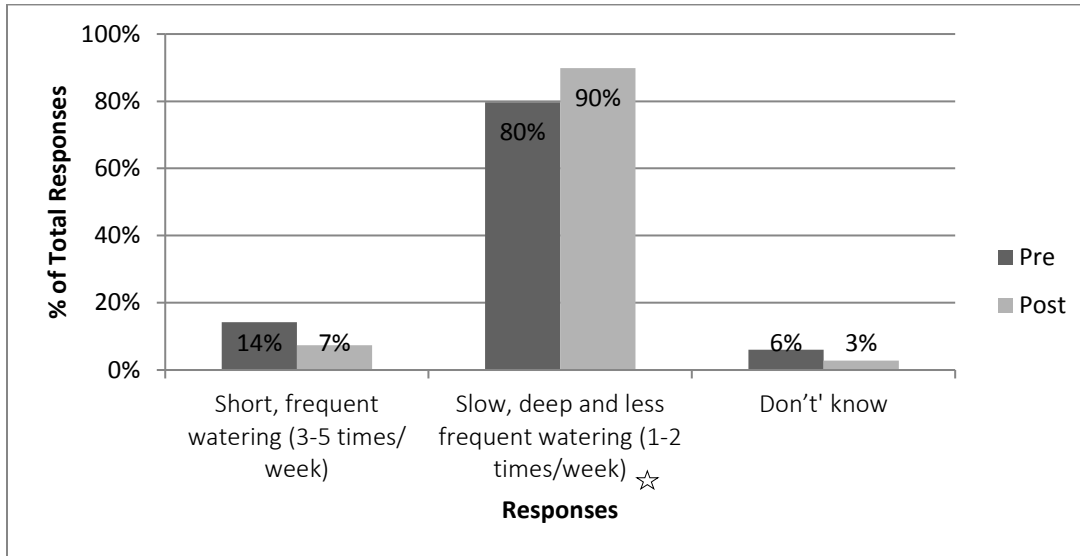
Question 1: A proper planting hole should be... (select the best answer)



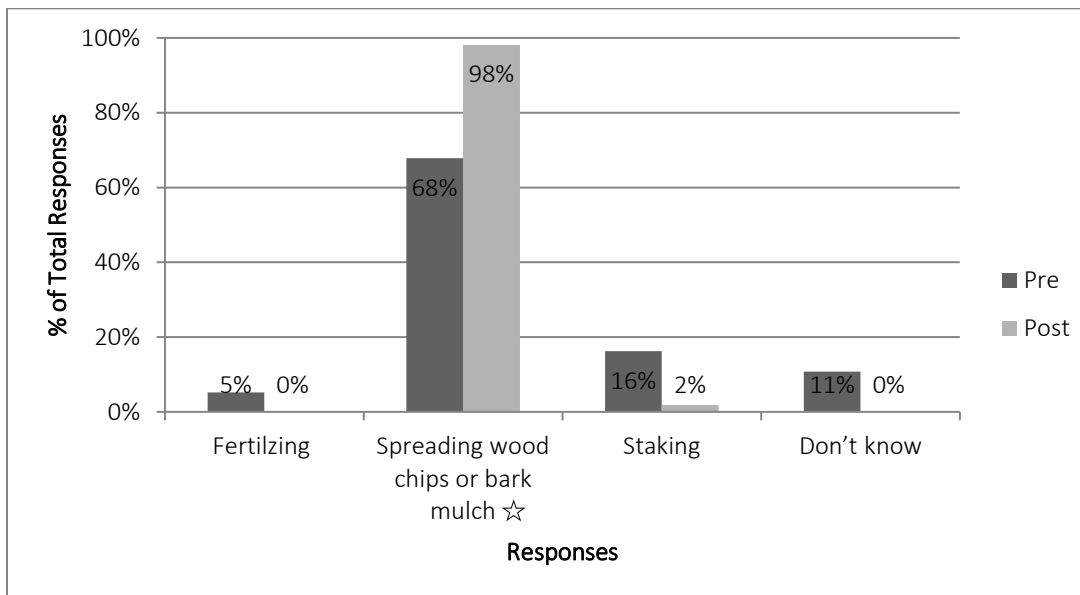
Question 2: Before planting your tree, you should... (select the best answer)



Question 3: *What is the most effective method of watering a young tree during the summer?*



Question 4: *What is the most beneficial thing you can do for your young tree, besides proper watering?*



### Conclusions & Program Impacts

The information we learned from this survey has helped inform program improvements and updates to strengthen the education we provide to new tree owners and to increase the health and survival of the trees planted through Trees for Neighborhoods. While the main goal of the survey was to assess the effectiveness of the planting and care workshops, the survey itself was a surprisingly useful tool to reinforce the concepts participants learned in the workshops.

#### *Emphasizing the Importance of the Planting Workshop*

Surprisingly, the pre-workshop survey scores of participants who classified their planting knowledge as “little to none” was only 1% lower than those who responded that they were “confident in their knowledge”. This reinforces that the planting and care workshop is an important requirement for

everyone who participates, not just those new to tree planting. We used the results of the pre- and post-workshop surveys to review the planting workshop script and make edits with the goal of emphasizing important concepts and debunking common misconceptions, such as loosening the soil at the bottom of a planting hole or adding compost to the planting hole. Since we learned that the survey helped reinforce concepts learned at the workshops, we also chose to use it again in 2015. While we did not administer a pre- and post-workshop survey in 2016, our workshop leaders used the same survey to test participants' knowledge following each workshop session.

#### *Importance of Follow-up Care Reminders*

Respondents who answered that they had previously participated in Trees for Neighborhoods scored higher on the pre-workshop survey than those who had never before participated (80% vs. 64%). While past participants did score higher than first time participants, on average they answered at least one question incorrectly. This is an important reminder that past participants may not be retaining all the information they learn in the planting workshop. Trees for Neighborhoods has strengthened its follow-up reminders, now sending at least two reminders a week during the dry summer months to water and mulch. In addition, Trees for Neighborhoods sends two summer watering postcards and a tree watering reminder magnet to all first-time participants.

#### *Creating a Trees for Neighborhoods "Survey Culture"*

While the pre- and post-workshop surveys provides us with a lot of meaningful data, we also discovered that it helped us create a survey and evaluation culture within Trees for Neighborhoods. In 2015 we began conducting summer field evaluations to assess the survival and health of all street trees planted through the program, along with the tree care behaviors of the adjacent property owners. We left a tree "report card" at every home we visited to let them know how their trees were faring and to give them some tree care advice. This serves as another follow-up care reminder and reinforces our commitment to growing healthy trees.