

# Natural Yard Care Program Evaluation

Amended Report as of January 4, 2019



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# Natural Yard Care Program Evaluation

## Introduction

The City of Bothell began a natural yard care outreach and education program nearly ten years ago in the interest of addressing water quality issues that are related to local residents' use of chemicals and pesticides as part of lawn and garden care. The City of Bothell previously participated in 2014-15 in an evaluation of natural yard care education in conjunction with selected North and South Sound communities to document the effectiveness of outreach education models that varied in key elements.<sup>1</sup>

In Fall 2018 the City of Bothell contracted with Tilth Alliance to deliver instruction on natural yard practices to reach local residents and to also evaluate the classes and workshops. The Garden Hotline Educators at Tilth Alliance have experience in conducting natural lawn and yard care education that engages local residents, is delivered with reasonable costs, and has been shown to contribute to residents adopting or maintaining natural yard care practices that will protect the environment and conserve natural resources.

The environmental education included a two-hour class on Natural Lawn Care, a two-hour class on Choosing the Right Plant, a two hour demonstration/workshop on Aeration Methods and a two hour demonstration/workshop on Planting and Mulching. The classes were delivered by professionals with expertise in botany, landscaping, and the influence of northwest maritime climate on gardening. The participants had access to ask the instructors questions and there were incentives offered in door prizes and an opportunity to have a consultation from an expert garden educator. The classes were each delivered on a weeknight in early October and the two workshops followed on Saturday October 13<sup>th</sup>.

There were 24 class attendees who completed the first class evaluation and 26 completed the second class evaluation. There were fewer participants at the Saturday workshops with nine attendees at the Mulching workshop and eight attendees completing the evaluation at the Aeration workshop.

The residents could have learned about the educational offerings through several means that included a City of Bothell brochure listing recreational options and activities, an announcement, or word of mouth promotion through friends, neighbors or local contacts. The participants could decide to attend one or more of the classes or workshops so an individual could attend two, four, six or eight hours of natural yard care instruction. A list of topics addressed in each class and demonstration is included in Appendix A. The expected results are that participants will adopt natural yard care practices free of pesticides and chemicals and will also practice conserving resources through watering wisely. This document summarizes the responses from participants who attended one or more of the classes and demonstrations to describe the extent that local residents are applying what they learned to improve natural yard care and resource conservation practices.

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<sup>1</sup> City of Bothell. Program Review. Changing Public Outreach Methods Based on Evaluation Review 2016 North and South Sound Natural Yard Care Education Evaluation Report Prepared for: Snohomish County and City of Olympia December 31, 2015

## Methods for Data Collection and Analysis

The overall goals for evaluating the program are: (1) to identify if the instruction contributes to the participants gaining new knowledge and increasing their understanding of natural lawn and yard care practices and (2) to describe if the program contributes to the participants' adoption of and implementation of positive or preferred best natural lawn and yard care practices.

- ◆ **Retrospective Pre-Post measures at Classes-** At the two class sessions, participants were asked to respond to questions to identify changes in their knowledge and understanding of natural yard care practices. The format was a retrospective pre-post questionnaire where participants self-assess how much they knew prior to the educational session and what they know after the session. This tool is especially appropriate for a short educational session of several hours duration where participants can reliably recall how much they knew about a topic at the start and end of a session. It is also a preferred approach to ask participants to complete a single form and not overwhelm them with separate pre and post- tests to complete in a span of two hours.

On a four point scale participants could rate themselves as not having any knowledge that corresponded to a 1, being unsure of what they knew that was counted as a 2, being somewhat familiar that corresponded to a 3, and being well informed that counted as a 4. The average pre-class self-rating can be compared to the average post-care self-rating. It would be expected that participants would tend to have less specific topic knowledge before a class and thus rate themselves lower but at the end of class they would have increased their understanding as indicated in an increase in the average post score.

- ◆ **Statements of intention at Workshops –** Following each of the workshops/ demonstrations the participants were asked to complete statements about how well prepared they were to apply what they learned and how likely they were to use what they learned to change their yard care practices. The results are reported by summing the responses of participants. The larger numbers of participants who reported they felt extremely well prepared would indicate that the demonstrations had succeeded in providing the skills and behaviors for the participants to implement in their home yards and gardens.
- ◆ **Follow-Up surveys for Class participants and Comparison Group-** The evidence of changing local residents' garden and yard care practices actually rests with their actions and behaviors at their homes. We can ask about their intentions to act using natural yard care practices but the proof will be what they do at home. Seven weeks after the second class, the participants in the two classes were sent a follow-up survey via email with a link to complete the questions. The questions asked what practices they had started or continued as a result of attending the classes and/or attending one or two demonstrations.

In order to assess the influence of class instruction and demonstration on changing yard care actions among local residents, the results from the class participants were compared to a small sample of Bothell residents who had not attended any of the lawn care, plant selection, planting

or aeration classes or workshops. The results of comparing the participant group to the non-participant sample is included which lend support to delivering instruction to local residents with the goal of increasing use of natural yard care practices. The future data collection plan is to repeat a follow-up survey to the class participants to identify if they adopt and implement or continue any use of natural lawn and yard care practices.

## Results: Participants increased knowledge of Lawn Care Practices



In the first class on Healthy Lawns and Gardens, the participants showed the largest gains in knowledge in specific natural lawn care practices. Most participants had not been aware about the frequency of using grass fertilizer and were not informed about the hazards of phosphorus.

Class topics	Pre-class average	Post class average	Change in knowledge
Grass fertilizer once a year with grass cycling	1.38	3.83	⬆️ +2.45
Not use phosphorus on lawns	1.58	3.83	⬆️ +2.25
Improving lawn drainage	1.83	3.91	⬆️ +2.08
Lawns need 6-8 hours sun daily	1.92	3.92	⬆️ +2.00

The participants also gained new knowledge in other lawn care topics. The slightly smaller changes would indicate that more participants had some knowledge about these topics prior to the class. These are still notable gains in learning about alternatives to lawns and watering wisely.

Class topics	Pre-class average	Post class average	Change in knowledge
Groundcovers as alternates to lawns	1.71	3.63	⬆️ +1.92
Water lawns an inch of water a week in dry months	2.00	3.83	⬆️ +1.83

In addition to learning about lawn care, watering, and groundcovers the participants were also informed about healthy soil, soil testing, and improving soil structure. There were several participants who were somewhat familiar with these topics at the start of class and only one or two participants in a class of 24 felt they were well informed about these topics prior to class. The increases reflect that most participants gained new knowledge about soil and practices that build healthy soil.

<sup>2</sup> Photo source: Natural Yard Care, Seattle Public Utilities.

Class topics	Pre-class average	Post class average	Change in knowledge
Getting soil tested is first step to identifying need for amendments	2.08	3.83	⬆️ +1.75
Healthy soil stored carbon and filters out pollutants	2.17	3.74	⬆️ +1.57
Plants may be more adaptable to slopes and shady areas.	2.33	3.83	⬆️ +1.50
Using a cover crop can be a means to improve soil structure.	2.17	3.58	⬆️ +1.41

Overall, in this class on Lawns and Gardens from the Ground Up, participants showed an increase in knowledge in each topic addressed during the class. This suggests that local residents caring for their lawns and yards benefit from having this instruction available and it will potentially contribute to implementing best natural practices.

### Additional class results: Participants also gained Knowledge about Plant Choices




The second class informed the attendees about selecting the “right plants for the right places” based on several considerations specific to our northwest climate and microclimates. Participants could learn about placing plants, clustering like plants, and watering plants. Generally, more of the class attendees were somewhat familiar with the conditions that influence plant selection than there were attendees who knew something about best practices for lawn care. While there were positive gains, these were smaller increases. This corresponds to the pattern of participants knowing something about plants to knowing a great deal and feeling well informed about the specific topics.



The two topics where the class attendees had the greatest gains in knowledge were in learning about the tuna can test for hose watering volume and adding organic materials to soil. The next topic where there was a notable increase in knowledge was in teaching participants to map their gardens.

Class topics	Pre-class average	Post class average	Change in knowledge
Tuna can test to measure hose watering volume to water efficiently	1.92	3.68	⬆️ +1.76
Adding organic material to sandy soil to improve water retention	2.12	3.88	⬆️ +1.76






<sup>3</sup> Photo source: portlandnursery.com

Making a map of the garden for sun, weather, soil, microclimates	2.19	3.76	 +1.57
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In this Plant Choices class approximately half of the participants were already somewhat aware of conditions to consider in selecting plants. They increased from an average of 2.42 or 2.46 to a post-class average of 3.8 or 3.84. This reflects that 77% of the class was very well informed in plant selection at the conclusion of the class.

Class topics	Pre-class average	Post class average	Change in knowledge
Local microclimates should be considered in plant selection.	2.42	3.80	 +1.38
Clustering like plants will lead to healthier plants.	2.46	3.84	 +1.38

Nearly half of the participants were somewhat familiar with planning their garden, placing plants, and feeding plants prior to the class. In these topics, the participants increased from being aware to becoming well informed about the topics. The amount of change that conveys knowledge gain is close to one and is less than one. These results contrast to the larger gains in knowledge of 2.28 and 2.45 that were described in the class on lawn care practices where more participants gained more knowledge.

Class topics	Pre-class average	Post class average	Change in knowledge
Sun and shade are equal considerations in planning a garden.	2.84	3.84	 +1.00
Size of trees and shrubs should be considered before plant placement.	2.42	3.36	 +.94
Light, wind, access all considerations on placing plants.	3.04	3.92	 +.88
Mulching can nourish plants and protect the soil.	3.02	3.84	 +.82
Right plant in right place preferable to transplant later.	2.96	3.69	 +.73

The results above show that the average of pre-class knowledge was close to 3 corresponding to a majority of the participants being familiar with the topic or already being well informed about the topic. There were 10 participants who identified that they were already informed about considering tree and shrub size in plant placement. Similarly eight participants identified they were already well informed about correct initial plant placement rather than transplanting later. Seven participants were already well informed about the benefits of mulching before the class started.

These participants may not have gained new knowledge but they likely affirmed what they knew about the best natural practices. Other participants gained new knowledge in these and other topics as shown above in the increases from the pre class averages to the post class averages. In one topic, 92% of participants were well informed about light, wind and access all being considerations in selecting where to place plants.

## Results from October Demonstrations/ Workshops on Planting and Mulching and Aeration

At the two demonstrations/ workshops the participants could see how to implement the techniques and methods that were described in the classes. All of the workshop participants had attended at least one of the classes on lawn care or plant selection.



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During the Planting and Mulching workshop the group of nine participants could get their hands dirty in planting and mulching plant beds. The workshops were successful in preparing the participants to use what they had learned as evident in 100% saying they were very well prepared. Nearly, as many,

89% felt they could readily apply what they heard about watering, root care and soil conditions. The same proportion felt they were very well prepared in using mulching techniques.



Photos: Laura Matter, Garden Hotline Program Manager

At the second workshop on Aeration, eight participants saw different variations and all left feeling very well prepared to use either manual or mechanical techniques. Similarly, all felt very well prepared to use one of the options demonstrated for top dressing. While there were practical tips provided on improving lawn drainage and water runoff, 63% felt very well prepared to use these guidelines and 25% felt at least somewhat prepared to use this practical advice.

The workshops reinforce the content delivered in the classes and are also an opportunity for the attendees to ask questions about applying the advice and practical tips in their own garden and yards. Approximately one third of the class participants also attended the Saturday demonstrations/ workshops. The workshops were timely as they were scheduled within a week or two of the classes with the intent of extending the participants' learning. In the future the class participants could be strongly

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<sup>4</sup> Photo source: Laura Matter, Garden Hotline Program Manager



encouraged to also attend one or both workshops with the intent of reinforcing their learning best practices to apply in their yards.

## **Discussion: Participants have adopted Natural Yard Care Practices**

There were 24 and 26 participants who completed the evaluations for the two classes and 17 of these local residents responded to the follow-up survey in early December 2018. Among respondents, 76% had attended one or both of the classes and 35% had been in one of the demonstrations. One objective was to identify if participants are putting their knowledge into action by adopting and implementing natural yard care practices.

**Maintaining and Improving Lawns-** While a number of respondents have not yet taken action to renovate or maintain their lawn, one encouraging finding was that at least half of the follow-up survey respondents have acted to improve the soil in their yard or garden. Most often they added compost to the soil but participants also used a cover crop, de-thatched, aerated, or used sheet mulch.

These survey respondents also took action to renovate or maintain their lawns. There were nearly equal numbers of respondents who used a slow release fertilizer, top dressed the lawn with compost or grass, or aerated. Eight respondents assessed the issue in their lawn health and four are considering using a seed mix such as Eco-lawn but are not yet decided. Survey respondents could have done more than one action to maintain their lawns.

**Planning for plant placement-** Four respondents have already placed plants in their gardens with attention to the width, depth, sun, shade and microclimate as taught in the Plants Class. Seven respondents have been more selective about plants and planned for future plant placement. A related finding is that ten respondents are planning to map their garden to renovate with new plants. This will be a time to apply what they heard in class about considerations for optimal plant placement. Another related finding is that five survey respondents chose plants with low watering needs which is a step toward decreasing water use.

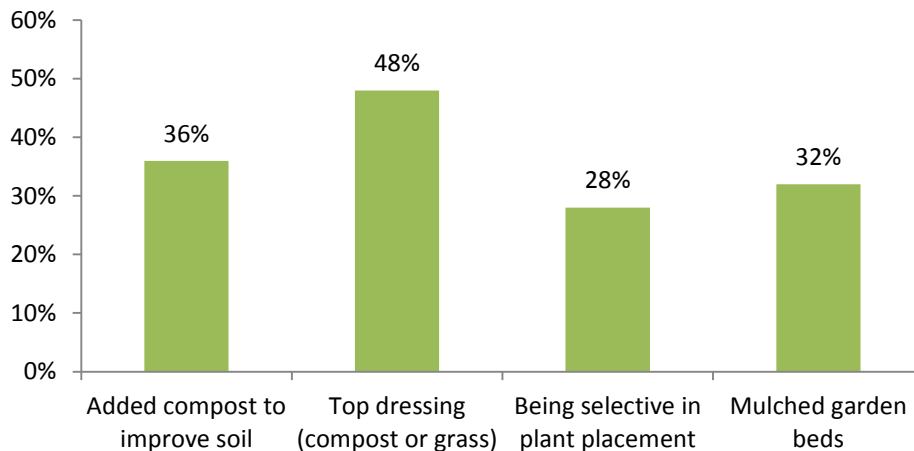
**Decreasing water use-** One aim of natural yard care classes is to support participants in learning to conserve resources including watering gardens and yards wisely. Eight participants took action to decrease water use by mulching garden beds while five aerated the lawn and five watered early or late to avoid evaporation. These are very encouraging results and the participants' early adoption of these actions may lead to them continuing these actions in the spring and summer.

Overall there are positive findings that the participants are already applying what they learned or are planning to use knowledge of natural garden and yard care practices. The chart below shows how class participants who responded to the follow-up survey are adopting or applying best practices.<sup>5</sup> In addition to the individuals represented below there were nine class participants who responded they are planning new plants but haven't yet planted and ten are planning to map their garden in the future. The sum of the respondents who have already taken action combined with those who are considering or planning future actions shows that at least half of the class is committed to natural yard care practices.

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<sup>5</sup> An n of 25 was used based on the average of 24 and 26 participants who completed the class evaluations at each of the two classes.

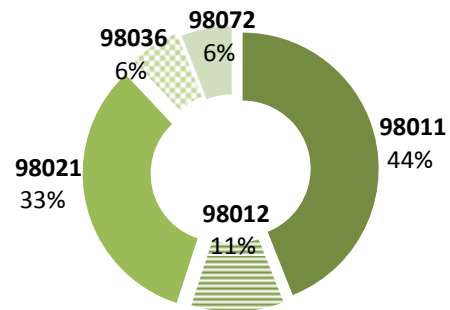
**Class participants are applying best practices in natural lawn & yard care (n=25)**



**Comparison of the Class Participants with other Local Residents**

There were 21 local residents who did not attend any of the Natural Yard Care classes or workshops who responded when sent a link to an online survey asking about their lawn and yard care practices. This formed a comparison group of non-participants. Eighteen responded to a question about where they lived and 13 non-participants lived in Bothell city limits and 5 lived outside the City limits. There were ten non-participants who answered the yard care questions so their answers are discussed below. Six respondents had lived in their homes for at least five years.

**Less than half of the non-participants lived in 98011 zip code (n=18)**



In this small sample of ten local gardeners, six respondents were already fairly knowledgeable about natural yard care. Six already knew or were implementing two preferred natural lawn and garden practices: applying mulch on plant beds and considering conditions that affect optimal plant placement. Five of these non-participants knew or were already (1) using methods for top dressing such as applying compost, (2) using a manual or mechanical aerator, or (3) mapping their garden.

In this small sample, fewer gardeners knew about testing soil to determine the need for amendments or testing the water hose volume to check for watering efficiently. This group of gardeners was also not as familiar with the use of cover crop to improve soil structure or the use of a ground cover in place of a traditional lawn. Only three of the gardeners were aware of the risk of using phosphorus on lawns because it can lead to algae in waterways.

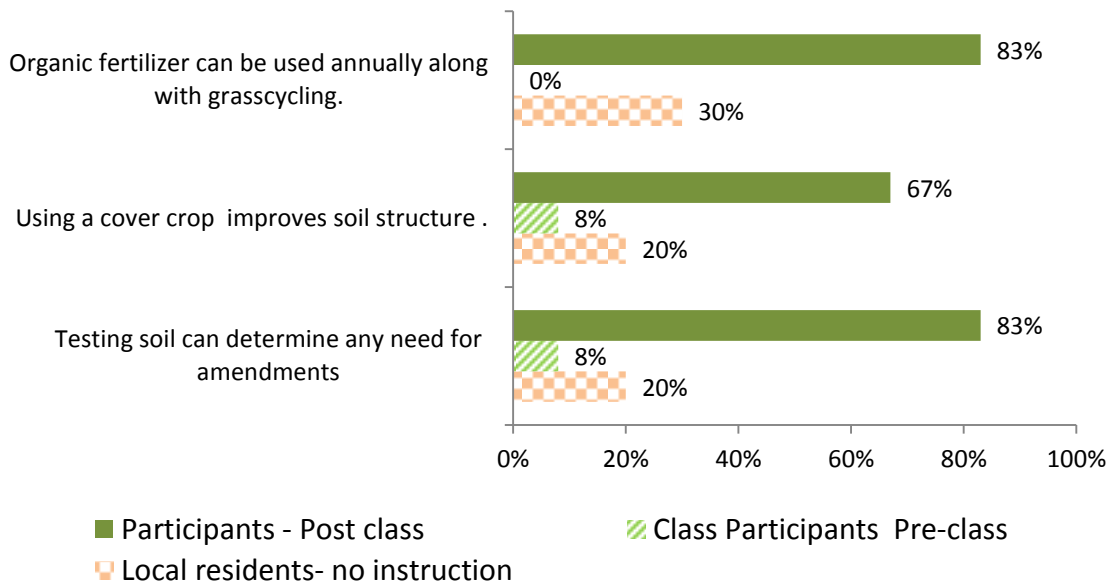
There was a much larger percent of the class participants who were well informed about natural lawn and yard care practices, following class or workshop instruction, than was found in the small sample of local residents who had not attended any classes or demonstrations. In each topic, the class participants

far exceeded other Bothell residents in their knowledge and preparation to apply knowledge in best practices.

In each of the charts below, the percent of class participants who were well informed on the topic or practice after the class (Post) is shown as well as the percent that felt informed on this topic before the class (Pre). The Post measures for the class participants exceed the non-participating local residents who responded that they were informed or already doing the selected action in their yard. The survey items are slightly shortened in the charts so the complete Natural Yard Care Questionnaire that was sent to non-participants is included in Appendix B.

After classes, a majority of class participants were well informed in applying organic fertilizer, using a cover crop or in testing soil to determine the need for amendments. This contrasts to just 30% or 20% of the local residents who had not attended any class who knew or did these practices.

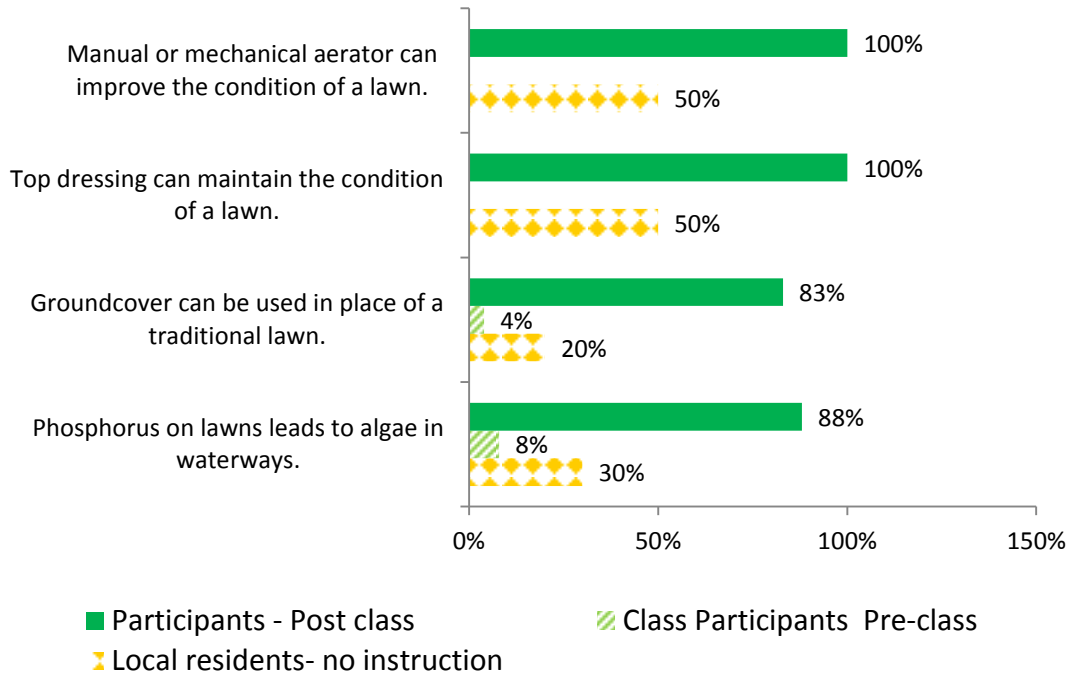
**Class participants were far more informed than local residents**



Two areas where the class participants learned new information that the comparison group of non-participants did not know were about the use groundcover in place of a traditional lawn and the harmful use of phosphorus. This is shown in the chart below where just 20% and 30% of the local residents were informed or were using these practices.

All workshop participants reported being well prepared to aerate their lawn or apply top dressing after participating in the workshops. This was not asked as a pre class question. In contrast, only 50% of non-participant local residents already knew or were already using these lawn and yard care practices.

**More Class participants than local residents knew natural lawn and yard care practices**

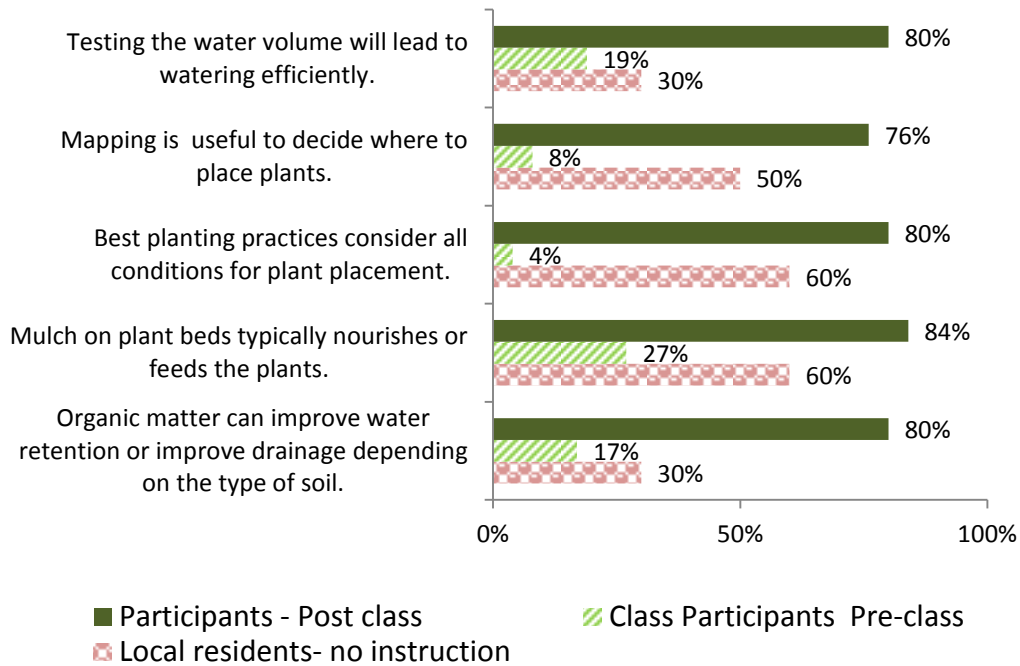


In two topic areas the percent of local residents who knew or were well informed about the topic was just slightly less than the percent of class participants who felt well informed about this topic after attending classes and demonstrations. Among the non-participants, 60% knew or were already considering many factors that influence successful plant placement and they knew about or were already mulching plant beds. This suggests that there are some local gardeners who have some prior knowledge about these topics and there may be sources of information and resources available about plant placement and about mulching plant beds.

After class 80% and 84% of the participants felt very well informed to consider conditions in plant placement and to mulch plant beds in their gardens or yards. These were very large increases for class participants who gained knowledge about plant placement and mulching plant beds as evident in only 4% and 27% feeling well informed about each of these topics prior to class.

The class participants also showed a large increase in understanding the importance of adding organic material to soil as evident in 17% initially knowing this and 80% feeling well informed about this practice after class. As evident in the chart below, 80% of class participants were well informed about the benefits of adding organic material but only 30% of the non-participant local gardener sample reported knowing or doing this action.

**Class participants became well informed about natural lawn and yard care practices that were lesser known by some local residents**



**Conclusions**

There were very large measures of change from the pre-class indicators of knowledge and action to the post-class indicators of knowledge and readiness to act. In some topic areas only 4% to 8% of the class participants were informed about a natural yard care practice prior to class but this increased to 80% after class or demonstration. The results support continuing the classes and demonstrations as a means of imparting natural lawn and yard care information to local residents.

Class participants had a very notable increase in their understanding of preparing soil with organic material (compost) and also were well informed about only using a grass fertilizer annually when done with grass cycling. These practices would contribute to reducing water run-off and protecting water quality.

In addition, the participants notably increased their knowledge and readiness to apply their knowledge about considering all factors that influence plant growth with optimal plant placement such as sun, shade, and microclimates. This new knowledge would also contribute to effectively watering plants. The class and demonstration participants also showed a large increase in knowing about measuring their water hose volume in order to water wisely and efficiently. These changes will likely contribute to the participants decreasing water use or at least using water without wasting it.

Class participants also had large gains in knowledge about building healthy soil. They learned about and practiced mulching methods that feed the soil. They also became very familiar with selecting the Right

Plant for the Right Place and they learned watering techniques. The participants' increased understanding should lead to not using any harmful chemicals so they will contribute to preventing toxic water run-off and protecting water quality.

There was a small sample of non-participants and it appears to be composed of individuals who are somewhat aware of natural lawn and yard care practices or were somewhat experienced in gardening methods. But, as evident from their responses there is still the opportunity to inform these and other local gardeners about the importance of taking action to protect natural resources through adopting and implementing natural garden and yard care practices.

## **Suggestions to Improve Classes and Future Class Topics**

The class participants who responded on the evaluations were very positive about their experience and appreciated having such knowledgeable presenters and engaged instructors. They were grateful for the expert advice and content that was specific to the Northwest and enjoyed the classes and demonstrations.

The class participants made a suggestion to hold the classes earlier in the year so gardeners can get out in better weather and to also have classes earlier in the evening. Another suggestion was to have a class in the spring to prepare gardeners to get out into their yards. There was also a request for more specific informational resources available online as well as printed materials. Some participants would like even more "how to" tips and photos in classes to help prepare for garden and yard work.

The participants also responded with their interest in new topics as well as expanding the topics that were presented this year by adding different information. In addition, the non-participants who responded to the survey also identified some topics of interest for future instruction. These local residents who had not attended classes indicated they would consider doing so in the future depending on the topic, day, and time. Suggested topics and the number of suggestions is listed below.

- ◆ Pruning (2), Managing trees, trimming
- ◆ Edible gardening, edible plants (2)
- ◆ Composting, using food scraps (2)
- ◆ Plant diseases and pests, reducing weeds without toxic weed killers (3), getting rid of moss and getting rid of moles
- ◆ Planting alternatives to grass lawns
- ◆ Container gardening
- ◆ Databases on plants
- ◆ Plants that go well together
- ◆ Pacific Northwest local plants, more on selecting plants
- ◆ Low maintenance yards with attractive plants

## **Appendix A**

### **Natural Yard Care Class and Workshop Topics**

#### **Class #1 10/2/18- Healthy Lawns and Gardens from the Ground Up**

- ◆ Healthy Soil
- ◆ Soil testing – options for testing
- ◆ Use of cover crop to improve soil structure
- ◆ Use of Grass Fertilizer
- ◆ Lawn Care- Watering your Lawn, Mowing, How much sun is needed, Lawn Drainage
- ◆ Groundcovers including seed mixes, Eco-lawn
- ◆ Selecting Plants- Slopes, Shade
- ◆ Managing Pests- Crane Flies, Red Thread

#### **Class #2 10/9/18- Smart Plant Choices for Northwest Gardens**

- ◆ Factors to consider in selecting plants and placing plants-light, wind, access, microclimate
- ◆ Plant placement- consider size of trees and shrubs, microclimate , clustering plants
- ◆ Healthy soil for plants with addition of organic material to improve drainage or buffer soil pH
- ◆ Types of soil, drainage in clay soil
- ◆ Planning a Garden- consider sun, shade
- ◆ Making a map of the garden
- ◆ Mulching garden beds – benefits of mulching
- ◆ Tuna can test to measure amount of hose watering

#### **Workshop/ Hands on Demonstration Part 1- 3<sup>rd</sup> in the Class/Workshop Series 10/13/18- Planting and Mulching**

- ◆ Best practices for planting- watering, root care, soil conditions
- ◆ Mulching plant beds
- ◆ Applying practical guides in your own garden
- ◆ Preparing to plant and mulch

#### **Workshop/Hands on Demonstration Part 2- 4<sup>th</sup> in the Class/Workshop Series 10/13/18- Aeration**

- ◆ Methods for aeration- spike or plug, manual aerator, mechanical aerator
- ◆ Top dressing techniques- Consider options of top soil, compost, grass
- ◆ Readiness to apply practical tips to improve lawn drainage, water runoff and moisture

## Appendix B Natural Yard Care Questionnaire

Hello Bothell Resident,

City of Bothell offered Natural Yard Care classes and a demonstration in October for residents including new homeowners. To assess the effectiveness of the classes and to identify the community need for more yard care classes, we invite you to answer the following questions. Your responses will be treated confidentially. To thank you for your time, if you wish to be entered in a drawing for a Northwest Maritime Garden Guide you will be directed to a separate page to enter your name and email, at the end of the survey. Thank you.

Please select one answer that best describes your gardening/yard care in the past four months		I don't know this and/or I don't plan to do this	I would consider doing this in the future.	I would like to know more about this before I decide.	I know this or I do this already	Unable to answer this
1	Testing soil can determine any need for amendments (e.g. lime, organic material)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Using a cover crop is a means to improve soil structure in my yard/garden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	A natural or organic fertilizer can be used annually along with grasscycling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	If phosphorus is used on lawns it leads to algae in waterways.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	A groundcover such as Eco-lawn or a seed mix can be used in place of a traditional lawn in all or part of the space available for a lawn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Methods such as top dressing, applying compost or grass cycling can maintain the condition of a lawn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Using a manual or mechanical aerator can improve the condition of a lawn with the plugs left on top of the lawn and watered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Amending the soil in a garden with organic matter can improve water retention or improve drainage depending on the type of soil.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please select one answer that best describes your gardening/yard care in the past four months		I don't know this and/or I don't plan to do this	I would consider doing this in the future.	I would like to know more about this before I decide.	I know this or I do this already	Unable to answer this
9	Mulch on plant beds typically nourishes or feeds the plants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Best planting practices consider all conditions for plant placement (plant width, depth, water need, soil conditions, microclimates).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Mapping a yard is very useful to decide where to place plants, shrubs, trees, lawn and/or ground cover.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Testing the water volume for the hose or watering technique used will lead to watering efficiently and effectively based on conditions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please continue with these final questions.		Not at all interested	Would depend on the topic	Would depend on day, time	Uncertain
13	How likely are you to attend a natural yard care class that is 2 hours long on a weeknight or weekend?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	How likely are you to attend a "get your hands dirty" demonstration on a garden or natural yard care topic?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. What garden or yard care topic would you most like to learn more about?

16. How long have you lived in your current home?

<input type="radio"/> Less than 6 months	<input type="radio"/> 6-12 months	<input type="radio"/> 1-2 years	<input type="radio"/> 3-5 years	<input type="radio"/> More than 5 years
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17. What is your zip code? \_\_\_\_\_

18. Would you like to be entered in a drawing to win a copy of the Northwest Maritime Garden Guide?

- NO
- YES (If yes, respondent is directed to new page with wording shown below)

Please enter in the box below the email address (or other information) so we can reach you if you win the drawing. We will contact you so you can receive the book.

We will keep the contact information you entered until one week after the drawing is completed on Dec 31, 2018.