

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.¹

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 13th.

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.

¹ 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.

² 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

³ 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

⁴ 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.

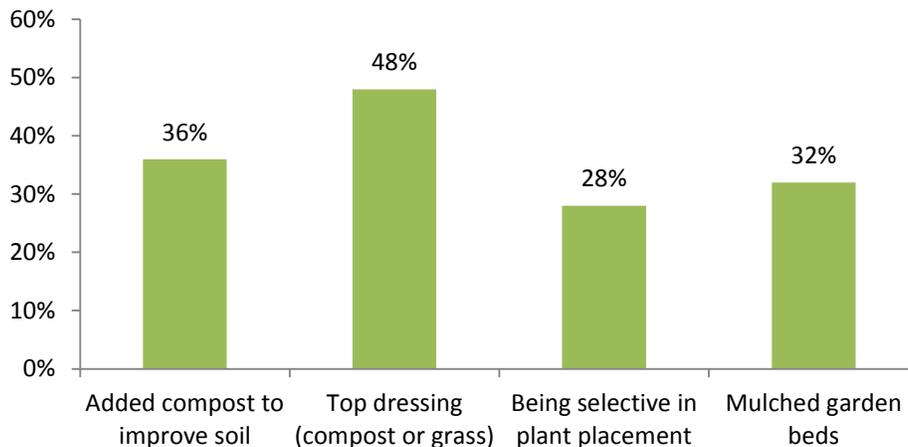
Planning for plant placement- Four respondents have already placed plants in their gardens with attention to the width, depth, sun, shade and microclimate as taught in the Plants Class. Seven respondents have been more selective about plants and planned for future plant placement. A related finding is 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.⁵ 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.

⁵ 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.

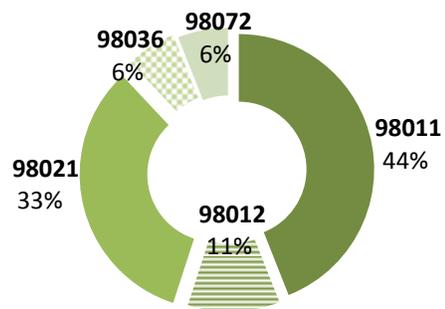
Class participants are applying best practices in natural lawn & yard care (n=25)



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.

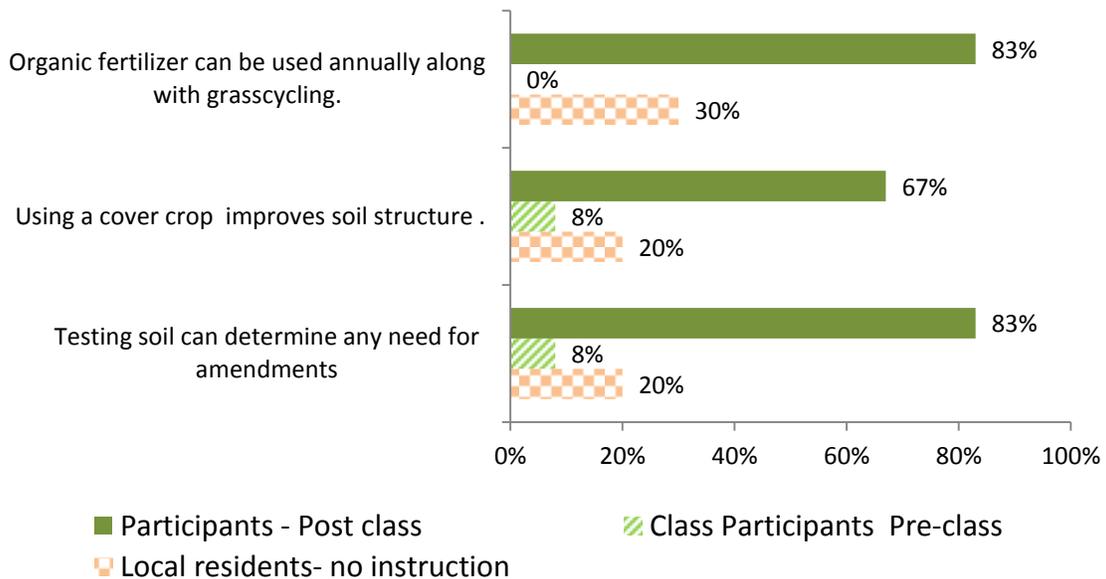
There was a much larger percent of the class participants who were well informed about natural lawn and yard care practices, following class or workshop instruction, than was found in the small sample of local residents who had not attended any classes or demonstrations. In each topic, the class participants

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.

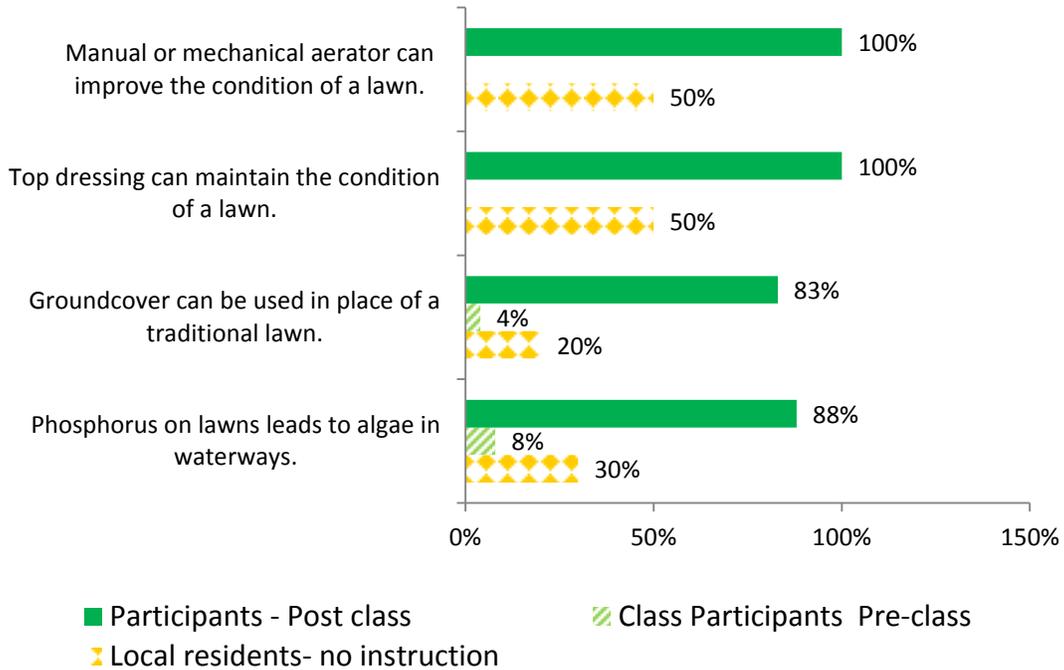
Class participants were far more informed than local residents



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

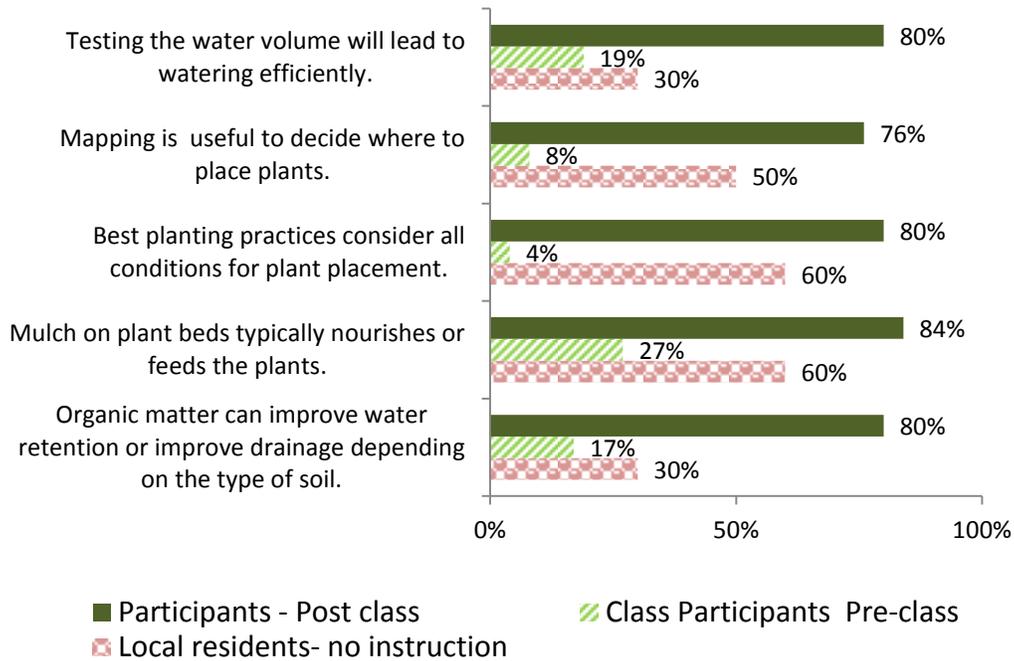


In two topic areas the percent of local residents who knew or were well informed about the topic was just slightly less than the percent of class participants who felt well informed about this topic after attending classes and demonstrations. Among the non-participants, 60% knew or were already considering 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- 3rd 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- 4th 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.

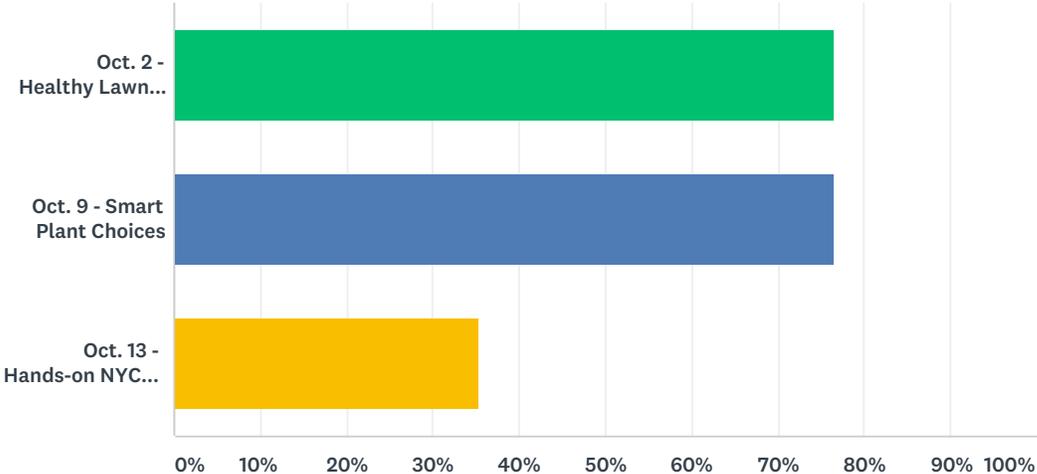
We will keep the contact information you entered until one week after the drawing is completed on Dec 31, 2018.

2018 Natural Yard Care Workshops

3-month follow-up participant survey

Q1 Which workshop(s) did you attend? (Check all that apply.)

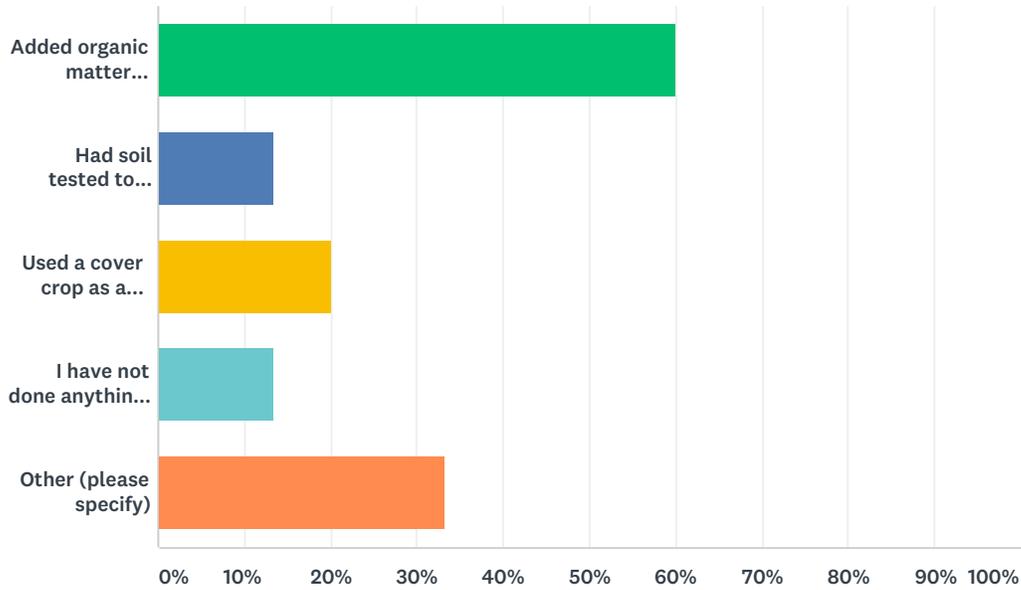
Answered: 17 Skipped: 0



ANSWER CHOICES	RESPONSES	
Oct. 2 - Healthy Lawns & Gardens	76.47%	13
Oct. 9 - Smart Plant Choices	76.47%	13
Oct. 13 - Hands-on NYC Basics	35.29%	6
Total Respondents: 17		

Q3 In what ways have you improved the soil in your yard or garden? (Check all that apply)

Answered: 15 Skipped: 2

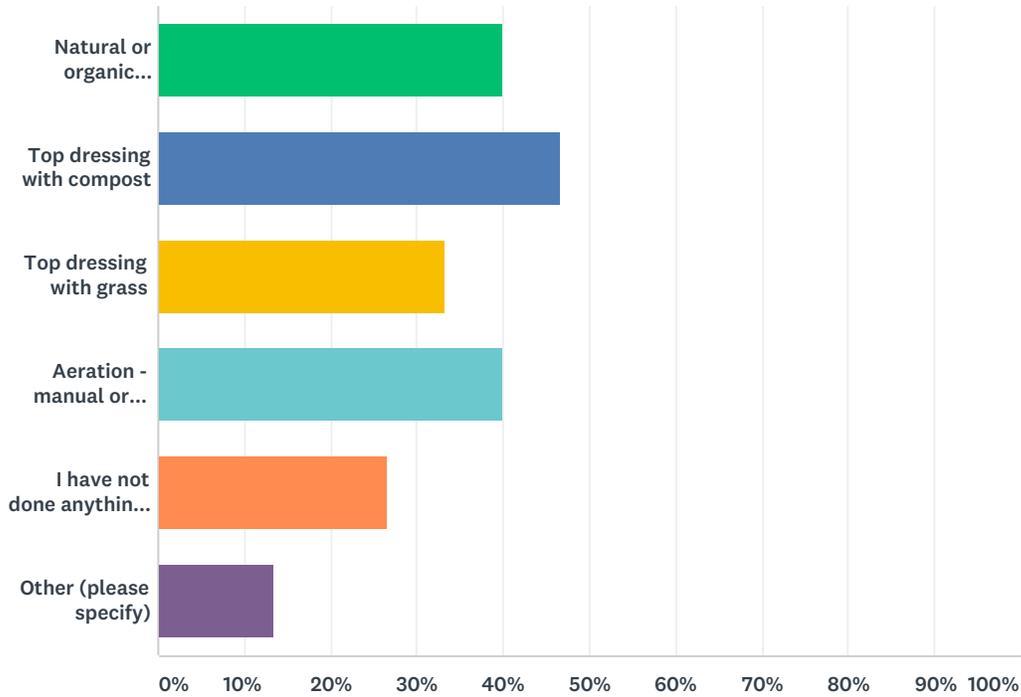


ANSWER CHOICES	RESPONSES
Added organic matter (compost)	60.00% 9
Had soil tested to identify if nutrients are needed	13.33% 2
Used a cover crop as a nitrogen and nutrient source	20.00% 3
I have not done anything to the soil in my yard or garden	13.33% 2
Other (please specify)	33.33% 5
Total Respondents: 15	

#	OTHER (PLEASE SPECIFY)	DATE
1	used sheet mulch over an area that will be planted in spring.	12/11/2018 10:50 AM
2	aerated and de-thatched	12/11/2018 8:15 AM
3	Have plans for more compost in the spring	11/27/2018 8:37 AM
4	started to make a plan, but haven't done anything physically to the yard yet	11/27/2018 8:30 AM
5	De-thatched and seeded	11/27/2018 7:43 AM

Q4 What have you used to renovate or maintain your lawn? (Check all the apply.)

Answered: 15 Skipped: 2

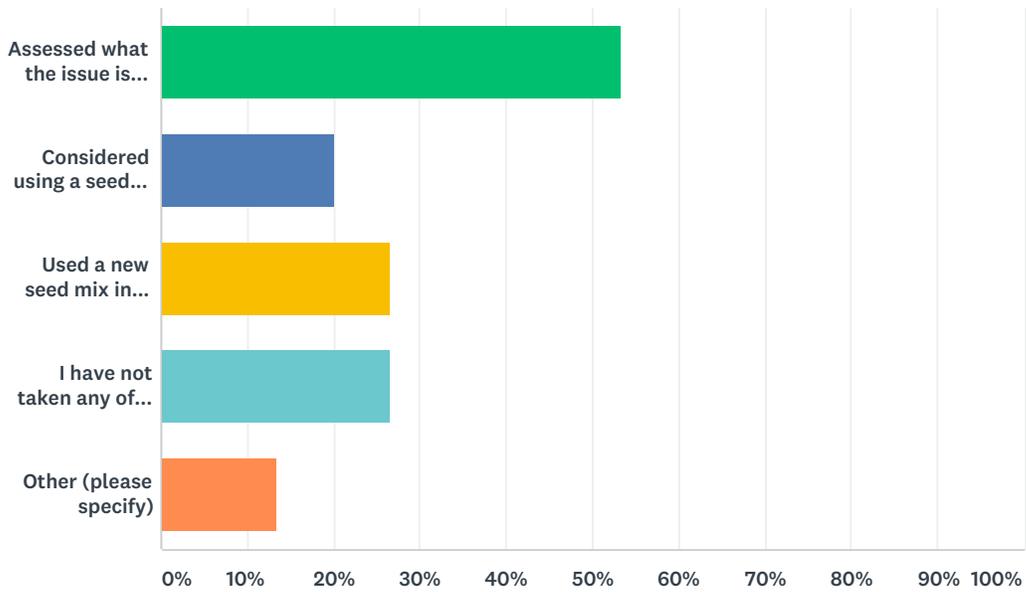


ANSWER CHOICES	RESPONSES
Natural or organic fertilizer (slow release)	40.00% 6
Top dressing with compost	46.67% 7
Top dressing with grass	33.33% 5
Aeration - manual or mechanical	40.00% 6
I have not done anything to renovate or maintain my lawn	26.67% 4
Other (please specify)	13.33% 2
Total Respondents: 15	

#	OTHER (PLEASE SPECIFY)	DATE
1	Does digging a trench for my new water line count?	11/27/2018 9:30 AM
2	Second round in spring	11/27/2018 8:37 AM

Q5 If you have had lawn problems, what actions have you taken to improve your lawn's health? (Check all the apply.)

Answered: 15 Skipped: 2

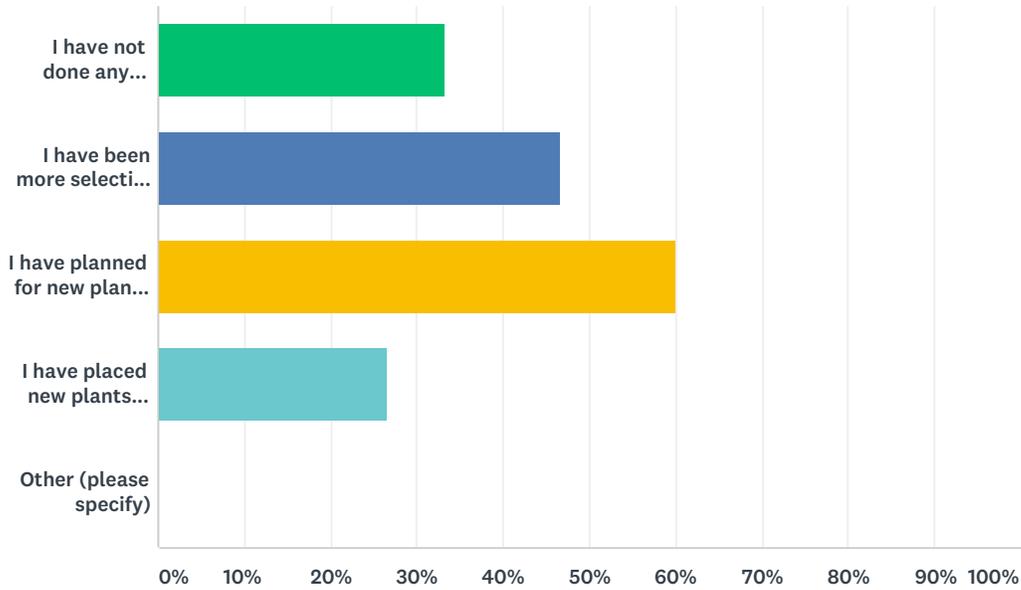


ANSWER CHOICES	RESPONSES
Assessed what the issue is, such as slope, ponding, and shade	53.33% 8
Considered using a seed mix such as Eco-lawn, but have not decided	20.00% 3
Used a new seed mix in place of other lawn seeds to replace lawn or in place of lawn	26.67% 4
I have not taken any of these actions	26.67% 4
Other (please specify)	13.33% 2
Total Respondents: 15	

#	OTHER (PLEASE SPECIFY)	DATE
1	lots of digging out weeds by hand!	12/11/2018 10:50 AM
2	Changed ph level of spot where chemicals got on grass	11/27/2018 8:37 AM

Q6 Have you applied best planting practices in placing new plants in your garden? (Check all the apply.)

Answered: 15 Skipped: 2

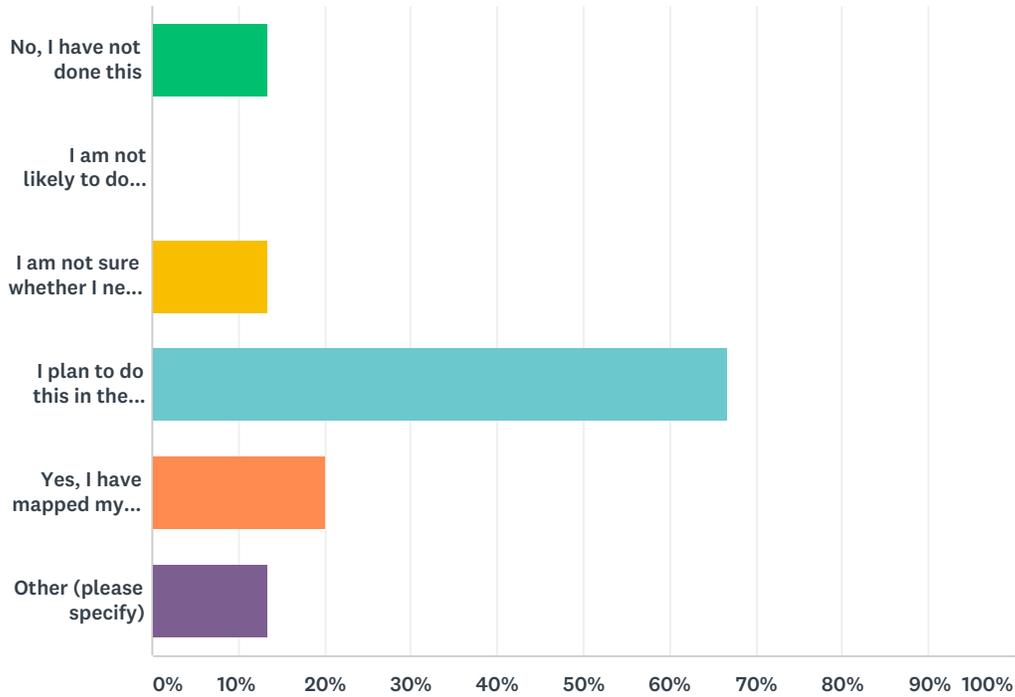


ANSWER CHOICES	RESPONSES
I have not done any planting yet	33.33% 5
I have been more selective in plant placement	46.67% 7
I have planned for new plants but haven't yet planted anything	60.00% 9
I have placed new plants considering width, depth, sun, shade, soil, and microclimate	26.67% 4
Other (please specify)	0.00% 0
Total Respondents: 15	

#	OTHER (PLEASE SPECIFY)	DATE
There are no responses.		

Q7 Have you mapped your garden to renovate with new plants? (Check all the apply.)

Answered: 15 Skipped: 2

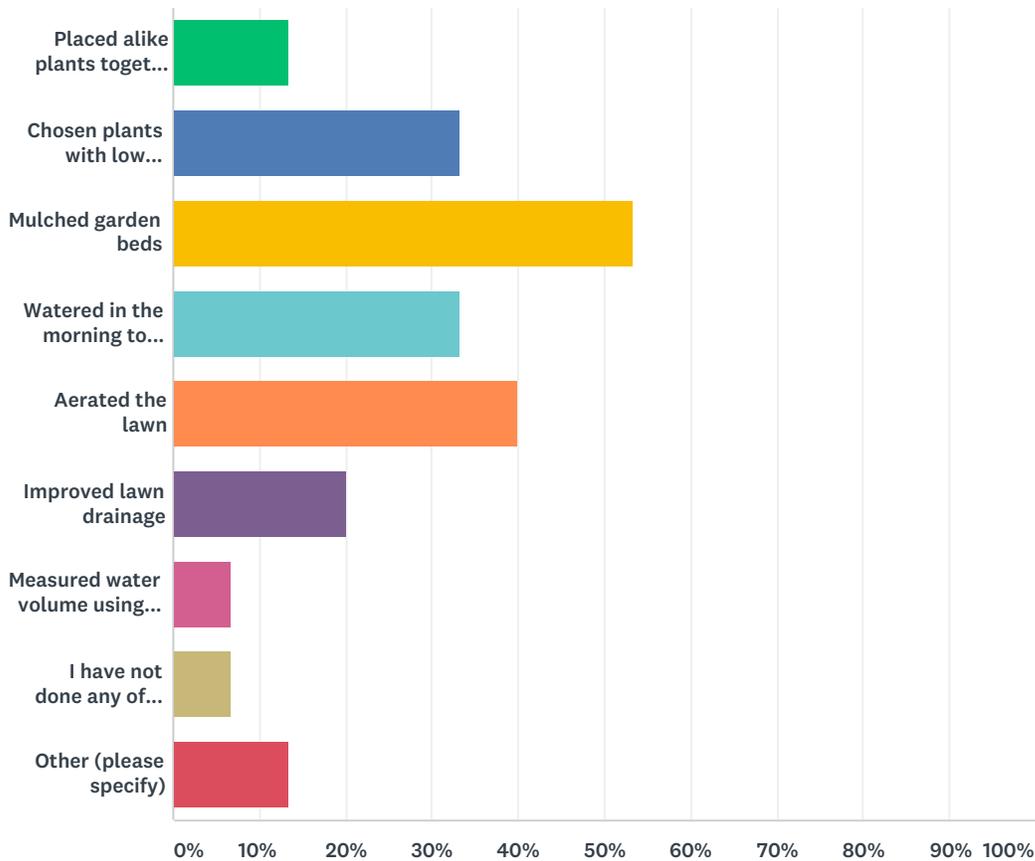


ANSWER CHOICES	RESPONSES	
No, I have not done this	13.33%	2
I am not likely to do this	0.00%	0
I am not sure whether I need to do this	13.33%	2
I plan to do this in the future	66.67%	10
Yes, I have mapped my garden	20.00%	3
Other (please specify)	13.33%	2
Total Respondents: 15		

#	OTHER (PLEASE SPECIFY)	DATE
1	I've started mapping the garden. It needs refinement.	12/11/2018 10:50 AM
2	Somewhat	11/27/2018 11:00 AM

Q8 What actions have you taken to improve watering and decrease water use? (Check all that apply.)

Answered: 15 Skipped: 2

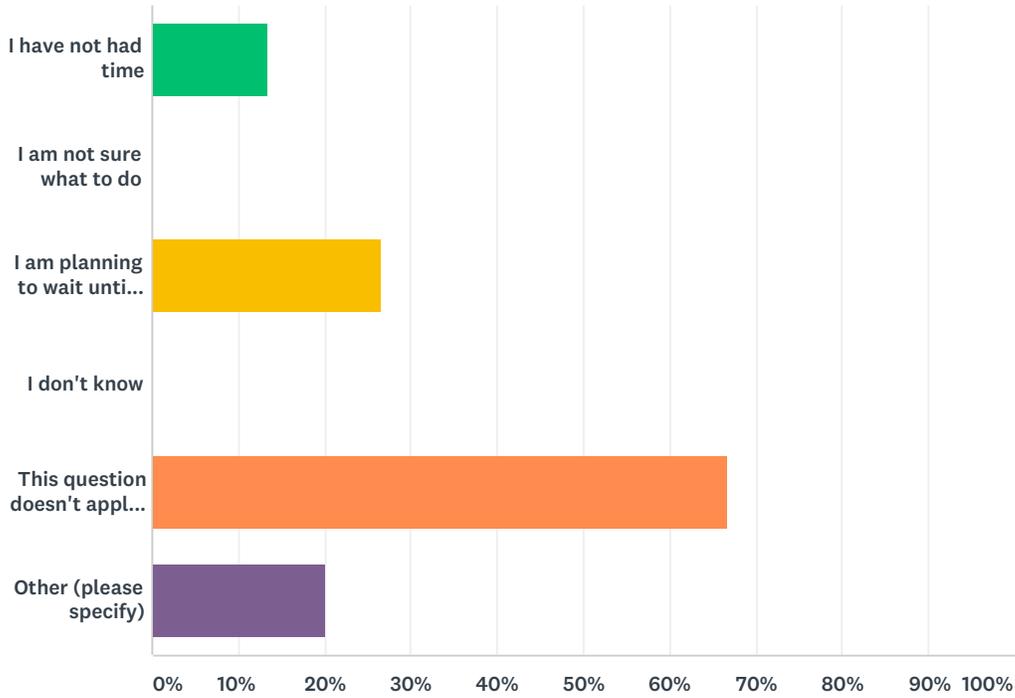


ANSWER CHOICES	RESPONSES
Placed alike plants together to increase watering efficiency	13.33% 2
Chosen plants with low watering needs	33.33% 5
Mulched garden beds	53.33% 8
Watered in the morning to avoid evaporation	33.33% 5
Aerated the lawn	40.00% 6
Improved lawn drainage	20.00% 3
Measured water volume using the tuna can test	6.67% 1
I have not done any of these	6.67% 1
Other (please specify)	13.33% 2
Total Respondents: 15	

#	OTHER (PLEASE SPECIFY)	DATE
1	Actually use a different can to measure water. same idea, though.	12/11/2018 10:50 AM

Q9 If you haven't taken any action in your yard or garden since the workshop(s) you attended, could you please tell us why? (Check all that apply.)

Answered: 15 Skipped: 2



ANSWER CHOICES	RESPONSES	
I have not had time	13.33%	2
I am not sure what to do	0.00%	0
I am planning to wait until spring or next fall	26.67%	4
I don't know	0.00%	0
This question doesn't apply to me	66.67%	10
Other (please specify)	20.00%	3
Total Respondents: 15		

#	OTHER (PLEASE SPECIFY)	DATE
1	I'm dealing with some medical problems	11/27/2018 11:00 AM
2	Great recommendations for pruning in winter and planting in spring	11/27/2018 8:37 AM
3	not sure what to do in certin cases	11/27/2018 8:24 AM

Q10 What Natural Yard Care topics would you like to learn more about?

Answered: 14 Skipped: 3

#	RESPONSES	DATE
1	More about plant choices and design	12/27/2018 11:07 AM
2	Pruning	12/13/2018 7:52 AM
3	Identifying plant diseases and pest. Ways to cure or control diseases and pests. Planting alternative to grass lawns. More details on composting.	12/11/2018 10:55 AM
4	How to keep weeds away (almost) permanently without using toxic weed killer.	12/11/2018 8:18 AM
5	- Edible gardening - Composting using food scraps and yard wastes - Container gardening	11/29/2018 4:35 PM
6	How to adapt for changing/warming climate	11/27/2018 11:26 AM
7	Not sure. I got some good resources at the workshops.	11/27/2018 11:05 AM
8	Information databases on plants	11/27/2018 9:32 AM
9	More about plant placement and maintenance	11/27/2018 9:09 AM
10	Plants that go well together. Creating a plant habitat that blends well together.	11/27/2018 8:41 AM
11	edible landscaping	11/27/2018 8:33 AM
12	Managing trees - trimming, fertilizing	11/27/2018 8:29 AM
13	all off them, sorry I missed your last two classes, will there be more? I hope	11/27/2018 8:28 AM
14	Pruning/trimming and home composing	11/27/2018 7:49 AM

Q11 What did you enjoy about the workshop(s) you attended?

Answered: 15 Skipped: 2

#	RESPONSES	DATE
1	All the information, candy too!	12/27/2018 11:07 AM
2	The instructors were knowledgeable and friendly.	12/13/2018 7:52 AM
3	The wealth of knowledge of the presenters. The presenters natural approach to gardening, using methods that are easy and inexpensive.	12/11/2018 10:55 AM
4	Very informative, great presentation and friendly presenters	12/11/2018 9:41 AM
5	I thought everything well planned and informative. The raffle drawing at the end was nice.	12/11/2018 8:18 AM
6	Hands on experiences and detailed demonstrations. The facility for the workshops are convenient well set up.	11/29/2018 4:35 PM
7	The presenters were knowledgeable and approachable. Meeting space was comfortable. Door prizes were fun.	11/27/2018 11:26 AM
8	Informed presenters, pleasant people, good resources, breaks and snacks.	11/27/2018 11:05 AM
9	Knowledgeable and friendly presenters	11/27/2018 9:32 AM
10	The presenters in both sessions were very informative and enthusiastic about the subjects. I liked learning about treating ground cover with cardboard, leaves and mulch.	11/27/2018 9:09 AM
11	I learned a lot but I really enjoyed getting to meet the people who put on the workshops (Christy Cox and others) and the extra help that she put into helping me with my personal and HOA planting concerns as well as introducing me to others who could help.	11/27/2018 8:41 AM
12	great instructors! hands on experience	11/27/2018 8:33 AM
13	To see how many folks in the community cared about their yards.	11/27/2018 8:29 AM
14	Just a very informative class friendly people	11/27/2018 8:28 AM
15	It's information that applies directly to our region, I didn't have to dig through information that doesn't apply to our area	11/27/2018 7:49 AM

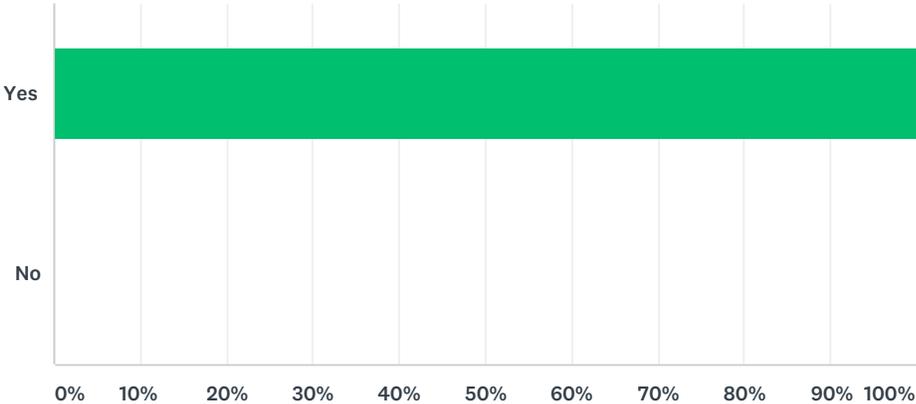
Q12 How could we make the next series of Natural Yard Care workshops better for you?

Answered: 14 Skipped: 3

#	RESPONSES	DATE
1	More pictures of "how to" in case I can't come on Saturday.	12/27/2018 11:07 AM
2	Please continue the way you've been doing.	12/13/2018 7:52 AM
3	Come fix my yard ;-)	12/11/2018 10:55 AM
4	I thought they were great just as they were.	12/11/2018 8:18 AM
5	More hands on activities please.	11/29/2018 4:35 PM
6	dont just duplicate the presentation but make sure to include new information	11/27/2018 11:26 AM
7	Held a little earlier in the evening, and maybe a little earlier in the year.	11/27/2018 11:05 AM
8	More structured information resources, paper and email options.	11/27/2018 9:32 AM
9	I thought they were both well worth the time I spent.	11/27/2018 9:09 AM
10	Have another one in the spring so that I can go out and mess in the garden right afterwards and not have to wait for the weather to be better.	11/27/2018 8:41 AM
11	Ask at the beginning of the workshop what the goals are there for the group, what the idea of a "good lawn" looks to the participants.	11/27/2018 8:33 AM
12	Not sure. I think you guys did a great job this year.	11/27/2018 8:29 AM
13	Don't know hoping to see what you come up with	11/27/2018 8:28 AM
14	Plan them for earlier in the year, I needed to do work on my lawn but by the time I learned what to do there was little time to get it done before cold weather set in. If the classes were a month earlier I could have fit the yard work I needed to do into my schedule more easily	11/27/2018 7:49 AM

Q14 Thanks again for attending at least one of our Natural Yard Care workshops! We're hoping to hold more workshops next fall on different topics. Would you like us to notify you about future workshops?

Answered: 15 Skipped: 2



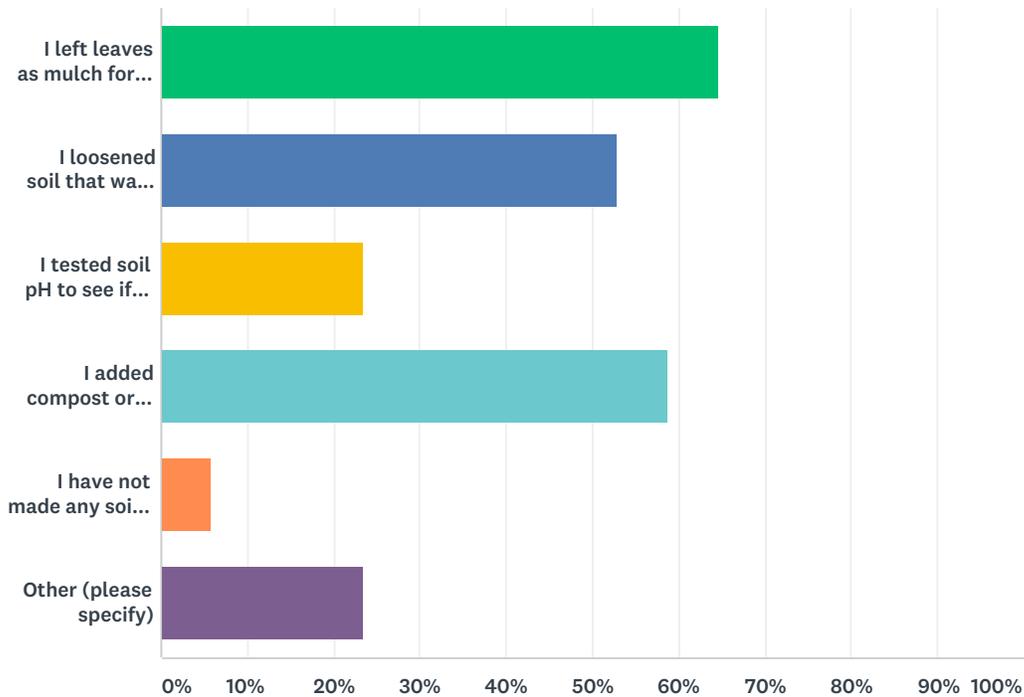
ANSWER CHOICES	RESPONSES	
Yes	100.00%	15
No	0.00%	0
TOTAL		15

2018 Natural Yard Care Workshops

6-month follow-up participant survey

Q1 Have you made any improvements to the soil in your yard or garden in the past six months? (Check all that apply)

Answered: 17 Skipped: 1

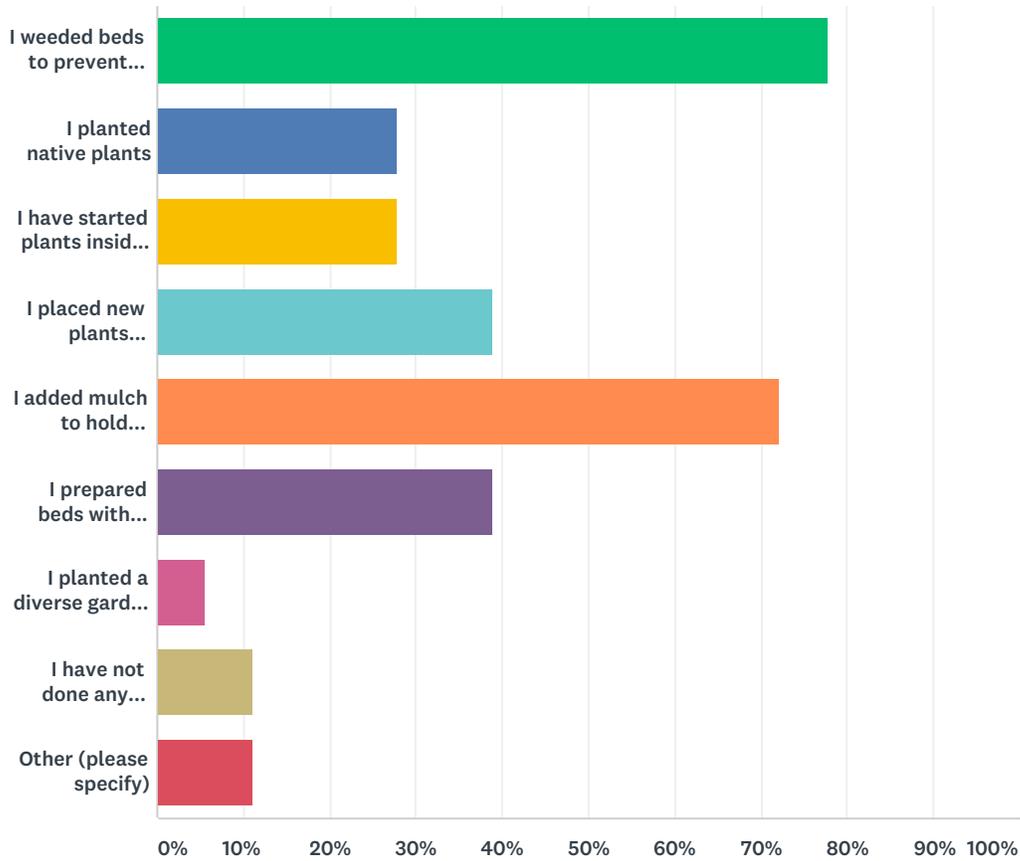


ANSWER CHOICES	RESPONSES	
I left leaves as mulch for garden beds	64.71%	11
I loosened soil that was compacted	52.94%	9
I tested soil pH to see if amendments are needed (cold winters can lead to acidity)	23.53%	4
I added compost or nutrients	58.82%	10
I have not made any soil improvements in the past six months	5.88%	1
Other (please specify)	23.53%	4
Total Respondents: 17		

#	OTHER (PLEASE SPECIFY)	DATE
1	on May 9-10 half the front yard grass will be removed and the soil amended.	4/30/2019 10:53 AM
2	Added fresh bark to the soil from weed protection and hold moisture	4/29/2019 4:35 PM
3	Just starting (weather permitting) to remove old mulch and lay down new mulch. Renting aerator next weekend that I won from the class.	4/16/2019 9:36 AM
4	Thatched raked and seeded grass	4/15/2019 10:14 AM

Q2 Have you done any best planting practices in the past six months? (Check all that apply)

Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES
I weeded beds to prevent weeds going to seed	77.78% 14
I planted native plants	27.78% 5
I have started plants inside (to move outside later)	27.78% 5
I placed new plants considering soil and microclimate	38.89% 7
I added mulch to hold moisture around plants	72.22% 13
I prepared beds with compost	38.89% 7
I planted a diverse garden to reduce pests	5.56% 1
I have not done any planting in the past six months	11.11% 2
Other (please specify)	11.11% 2
Total Respondents: 18	

#	OTHER (PLEASE SPECIFY)	DATE
1	I had tree root samples examined by WSU Clinic. Fungus was found. Contracted for tree removal. Afterward soil will be amended to eliminate fungus.	4/30/2019 10:53 AM

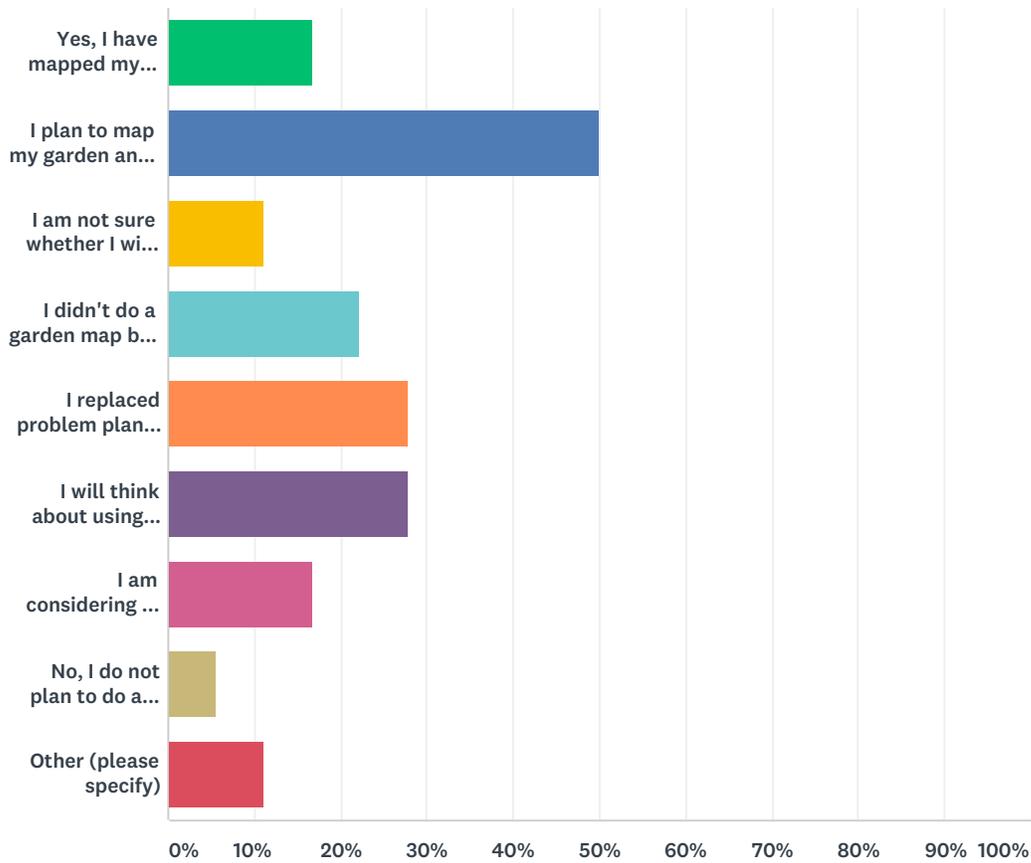
Natural Yard Care 6-month follow-up survey

2 I earned a free Tilth onsite consultancy during the last session in 2018. I'm extremely disappointed with this offer as the lady that was assigned to show up at our place completely forgot about the appointment and when she arrived it was too late in the night when it was hard to assess the yard. I get that this happens and actually had a productive discussion however she failed to share the detailed notes and summary on the recommendations till today. This would have helped to be more efficient with my gardening have I had the recommendations in hand.

4/29/2019 4:35 PM

Q3 Are you considering planning your garden, including mapping? (Check all that apply)

Answered: 18 Skipped: 0

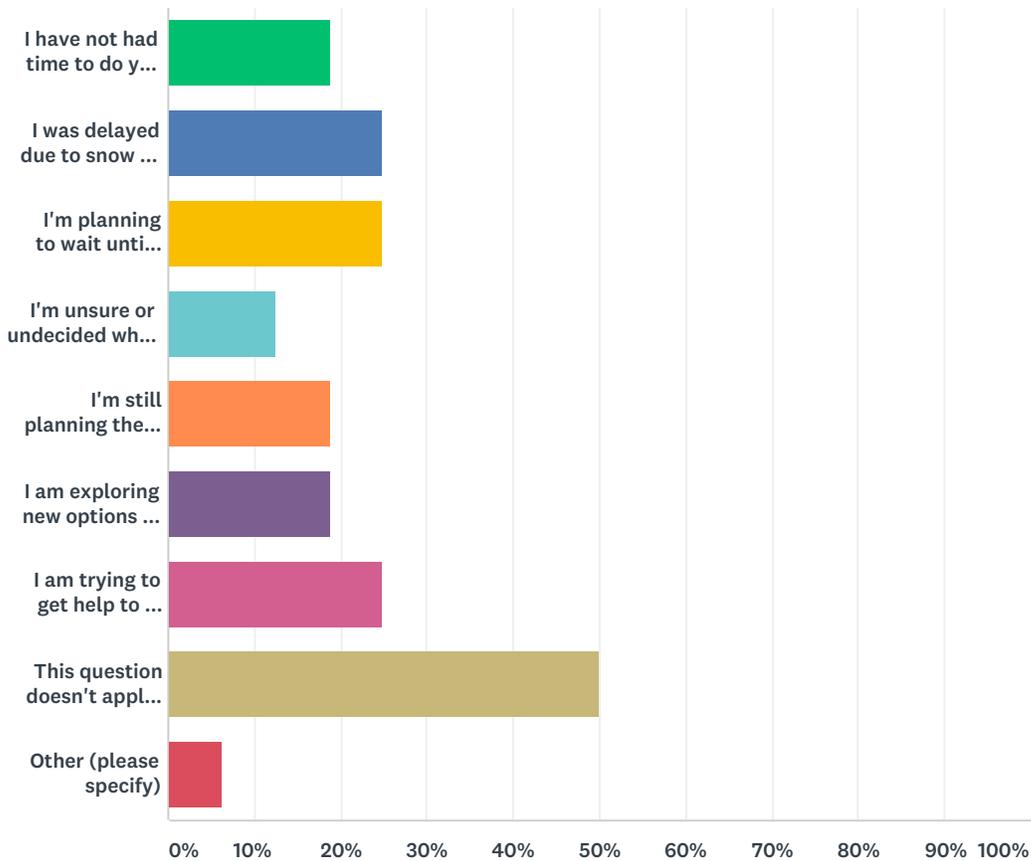


ANSWER CHOICES	RESPONSES	
Yes, I have mapped my garden or will start work soon	16.67%	3
I plan to map my garden and make changes	50.00%	9
I am not sure whether I will do any garden mapping or planning	11.11%	2
I didn't do a garden map but I added new plants	22.22%	4
I replaced problem plants or I relocated plants	27.78%	5
I will think about using drought-resistant plants	27.78%	5
I am considering a rain garden	16.67%	3
No, I do not plan to do any garden planning or mapping	5.56%	1
Other (please specify)	11.11%	2
Total Respondents: 18		

#	OTHER (PLEASE SPECIFY)	DATE
1	mid May plants will be planted according to map. Most plants selected are drought resistant.	4/30/2019 10:53 AM

Q4 If you have not been active in your yard or garden in the past six months, could you please let us know why? (Check all that apply.)

Answered: 16 Skipped: 2

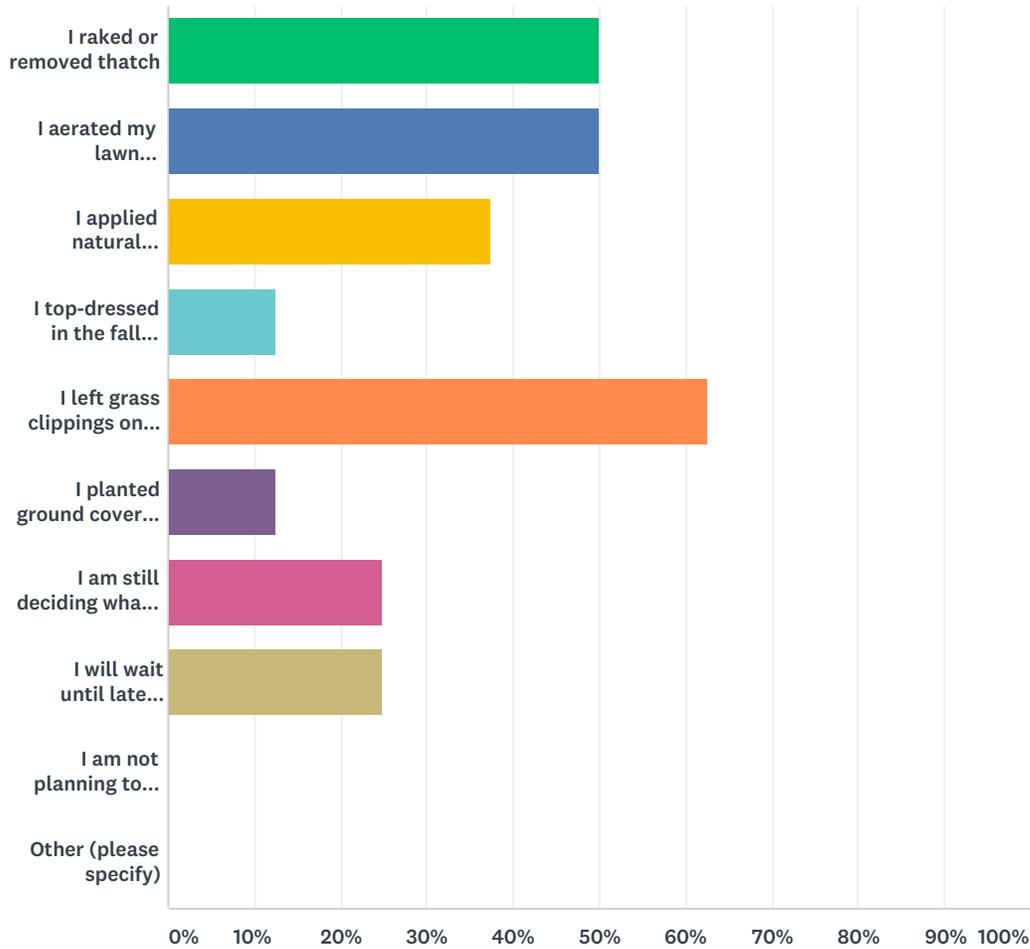


ANSWER CHOICES	RESPONSES
I have not had time to do yard work	18.75% 3
I was delayed due to snow and weather	25.00% 4
I'm planning to wait until later in spring	25.00% 4
I'm unsure or undecided what to do	12.50% 2
I'm still planning the actions I will take	18.75% 3
I am exploring new options or choices	18.75% 3
I am trying to get help to do the work	25.00% 4
This question doesn't apply to me	50.00% 8
Other (please specify)	6.25% 1
Total Respondents: 16	

#	OTHER (PLEASE SPECIFY)	DATE
1	always more to do	4/15/2019 8:18 AM

Q5 What have you practiced to renovate or maintain your lawn? (Check all that apply)

Answered: 8 Skipped: 10



ANSWER CHOICES	RESPONSES	
I raked or removed thatch	50.00%	4
I aerated my lawn (mechanically or manually)	50.00%	4
I applied natural fertilizer in fall	37.50%	3
I top-dressed in the fall with compost	12.50%	1
I left grass clippings on the lawn to feed it (grasscycling)	62.50%	5
I planted ground cover to slow runoff	12.50%	1
I am still deciding what to do to improve my lawn	25.00%	2
I will wait until late spring to add natural fertilizer	25.00%	2
I am not planning to renovate or maintain my lawn	0.00%	0
Other (please specify)	0.00%	0

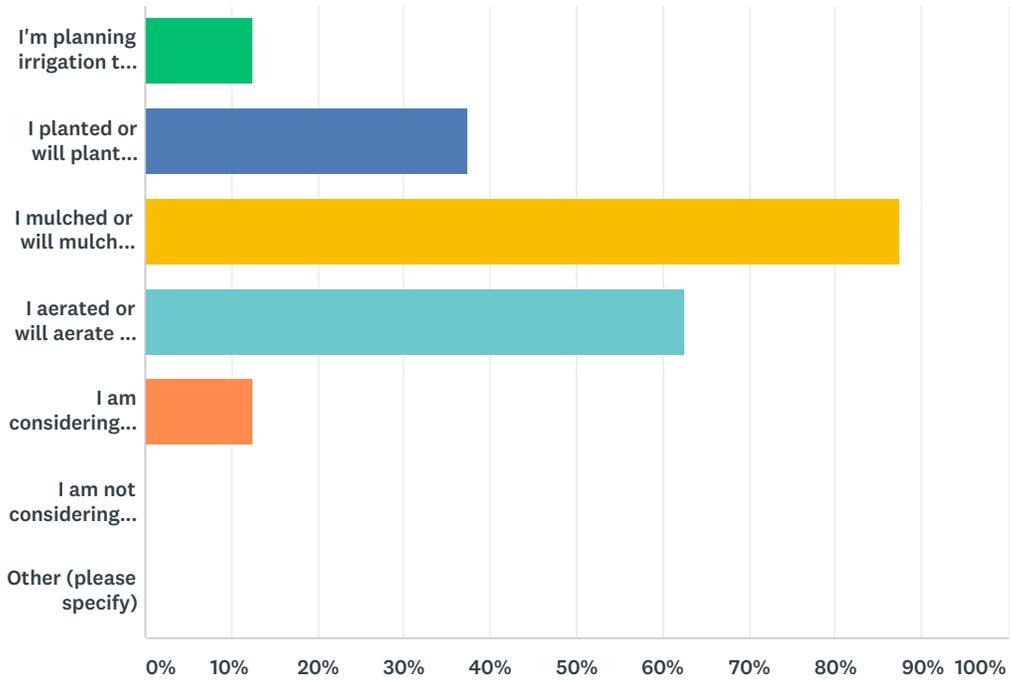
Natural Yard Care 6-month follow-up survey

Total Respondents: 8

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q6 What actions are you taking to improve watering and decrease water use? (Check all that apply)

Answered: 8 Skipped: 10

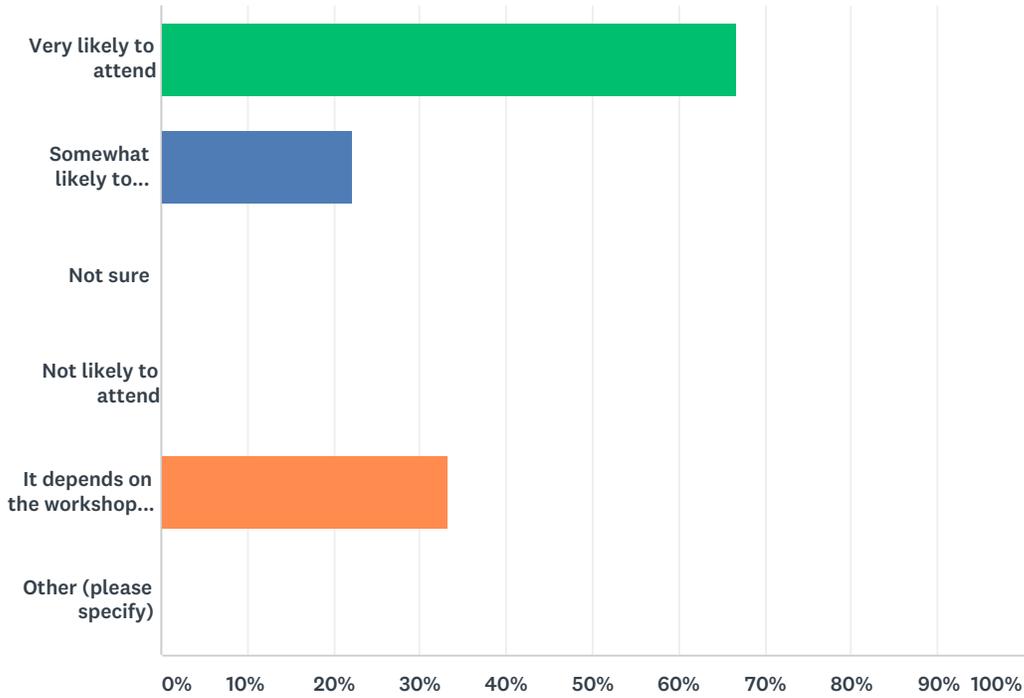


ANSWER CHOICES	RESPONSES	
I'm planning irrigation to reduce wasting water	12.50%	1
I planted or will plant drought-tolerant plants	37.50%	3
I mulched or will mulch garden beds	87.50%	7
I aerated or will aerate the lawn	62.50%	5
I am considering adding a rain barrel or cistern	12.50%	1
I am not considering actions to improve watering	0.00%	0
Other (please specify)	0.00%	0
Total Respondents: 8		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q7 We're planning to hold another series of Natural Yard Care workshops this September, probably focused on some different topics. How likely are you to attend one of the workshops?

Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES
Very likely to attend	66.67% 12
Somewhat likely to attend	22.22% 4
Not sure	0.00% 0
Not likely to attend	0.00% 0
It depends on the workshop topics	33.33% 6
Other (please specify)	0.00% 0
Total Respondents: 18	

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q8 What Natural Yard Care topics are you interested in learning about?

Answered: 15 Skipped: 3

#	RESPONSES	DATE
1	Pruning advice	5/1/2019 7:01 PM
2	How to correct soil compaction Appropriate techniques for pruning bushes, and trees. How to interpret a soil analysis, and how to select amendments to correct soil	4/30/2019 10:57 AM
3	Vegetable and fruit gardening	4/29/2019 4:35 PM
4	How to keep gardening affordable Sharing resources: plants, chip dumps	4/29/2019 1:51 PM
5	Garden design	4/29/2019 10:02 AM
6	Low to no maintenance lawn / landscape.	4/23/2019 3:31 PM
7	Organic edible gardening, Container gardening, Cut flowers/pollinator gardening, Permaculture gardening	4/17/2019 4:28 PM
8	~Planting for butterflies, bees, and birds ~Pruning and trimming with demonstration/ hands-on	4/16/2019 9:39 AM
9	Design	4/15/2019 11:39 AM
10	Tree pruning, shrub trimming, managing bulbs - best time to manage these yard duties	4/15/2019 10:51 AM
11	More detailed specifics about how to identify appropriate plants for various areas of the yard. Using natural care techniques with aesthetic plant displays, natural bed maintenance. Care of non-yard areas such a as weeds in cracks, decreasing weeds in natural paths, using recycled materials in garden displays...	4/15/2019 10:18 AM
12	Raised bed gardens	4/15/2019 9:30 AM
13	native edibles, planting for birds and bees	4/15/2019 8:19 AM
14	which plants to choose.	4/15/2019 8:15 AM
15	Plant pairings - what works well together for different kinds of gardens - butterfly, bee, shade, hot and dry (this one applies to me!) etc	4/15/2019 8:09 AM

Q9 If you would like to be entered into the drawing, please type your email address. (We won't share your email address with others.)

Answered: 12 Skipped: 6

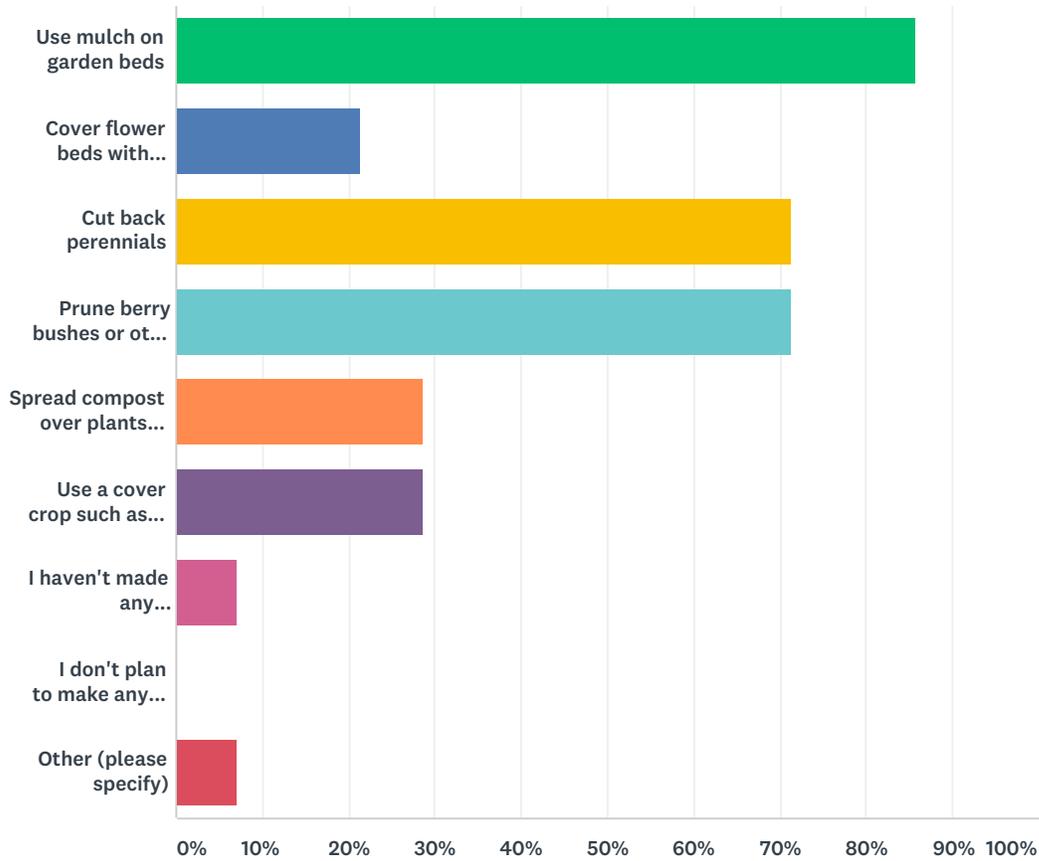
#	RESPONSES	DATE
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2018 Natural Yard Care Workshops

12-month follow-up participant survey

Q1 What have you done or what do you plan to do to prepare your garden to rest in late fall and winter? (Check all that apply)

Answered: 14 Skipped: 0

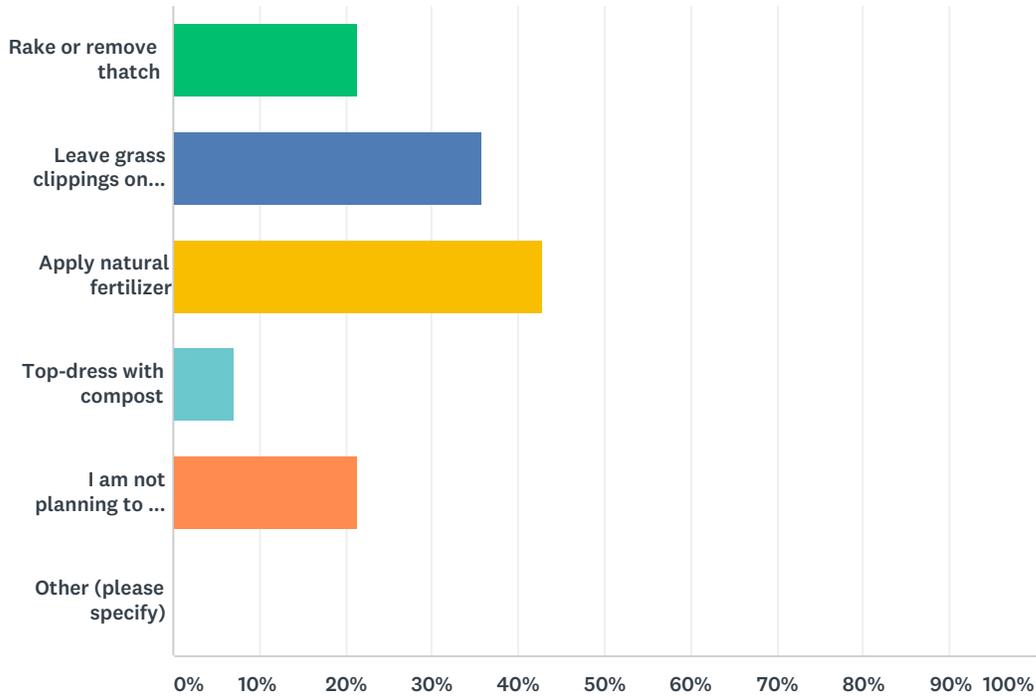


ANSWER CHOICES	RESPONSES	
Use mulch on garden beds	85.71%	12
Cover flower beds with burlap	21.43%	3
Cut back perennials	71.43%	10
Prune berry bushes or other bushes	71.43%	10
Spread compost over plants that are still growing	28.57%	4
Use a cover crop such as winter rye	28.57%	4
I haven't made any preparations	7.14%	1
I don't plan to make any preparations	0.00%	0
Other (please specify)	7.14%	1
Total Respondents: 14		

#	OTHER (PLEASE SPECIFY)	DATE
1	Did soil testing	10/15/2019 9:51 AM

Q2 What have you done or what do you plan to do to prepare your lawn for winter? (Check all that apply)

Answered: 14 Skipped: 0

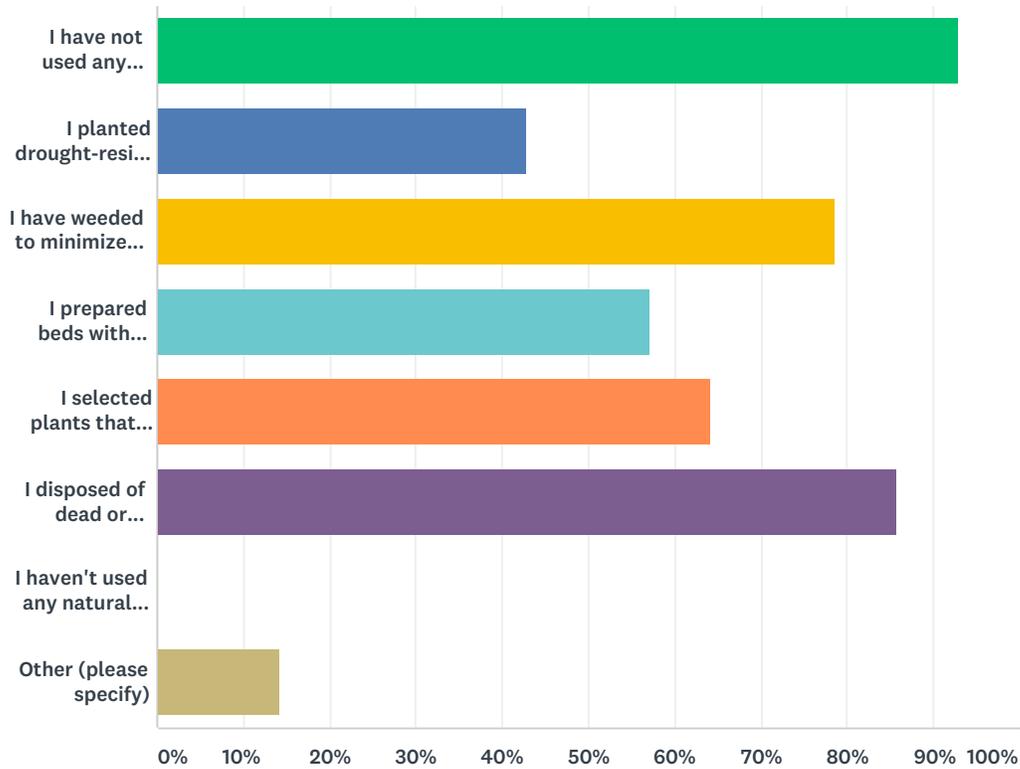


ANSWER CHOICES	RESPONSES	
Rake or remove thatch	21.43%	3
Leave grass clippings on the lawn to feed it (grasscycling)	35.71%	5
Apply natural fertilizer	42.86%	6
Top-dress with compost	7.14%	1
I am not planning to do anything to maintain my lawn for winter	21.43%	3
Other (please specify)	0.00%	0
Total Respondents: 14		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q3 In the past year, what natural yard care practices have you followed? (Check all that apply)

Answered: 14 Skipped: 0

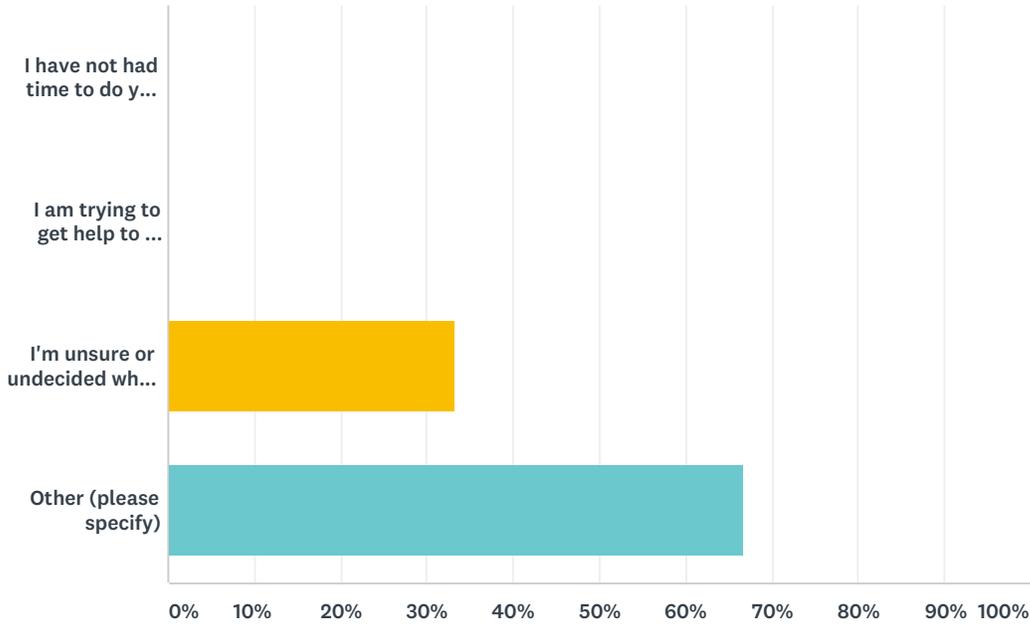


ANSWER CHOICES	RESPONSES	
I have not used any chemicals or pesticides	92.86%	13
I planted drought-resistant plants	42.86%	6
I have weeded to minimize weeds going to seed	78.57%	11
I prepared beds with compost	57.14%	8
I selected plants that attract pollinators	64.29%	9
I disposed of dead or diseased plants	85.71%	12
I haven't used any natural yard care practices	0.00%	0
Other (please specify)	14.29%	2
Total Respondents: 14		

#	OTHER (PLEASE SPECIFY)	DATE
1	I have consulted with a few folks regarding my very rocky lawn and have determined that I will need to bring in topsoil in the spring	10/22/2019 8:26 AM
2	Compost garden clippings	10/15/2019 9:51 AM

Q4 If you have not been active in your yard or garden in the past year, could you please let us know why? (Check all that apply.)If you've actively worked in your yard or garden, please skip to Question #5.

Answered: 3 Skipped: 11

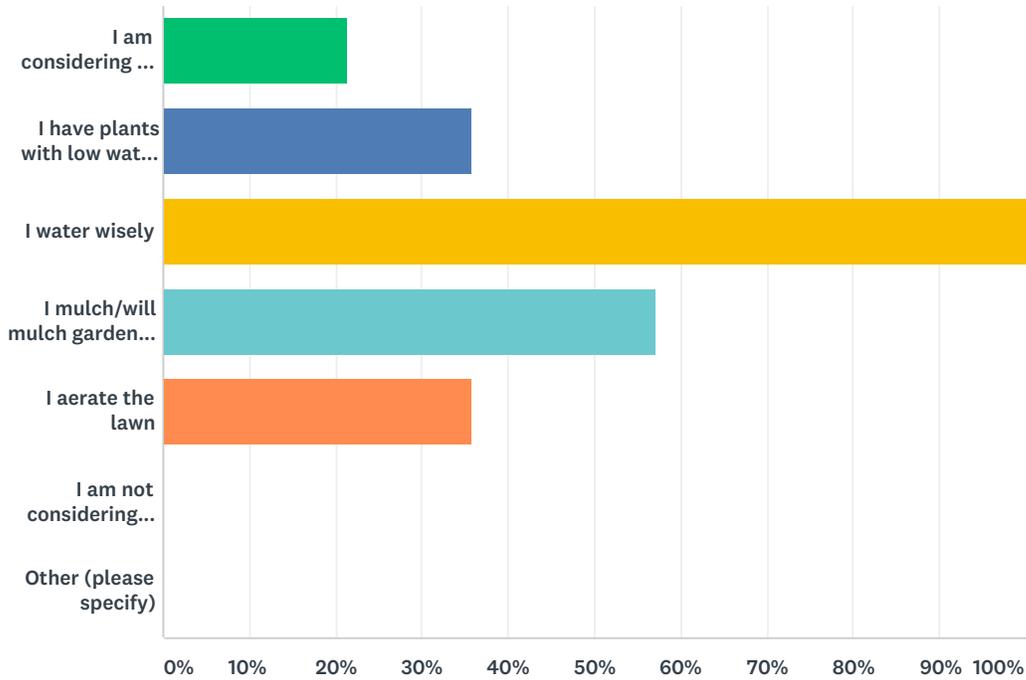


ANSWER CHOICES	RESPONSES
I have not had time to do yard work	0.00% 0
I am trying to get help to do the work	0.00% 0
I'm unsure or undecided what to do	33.33% 1
Other (please specify)	66.67% 2
Total Respondents: 3	

#	OTHER (PLEASE SPECIFY)	DATE
1	I have been less active due to rabbits eating anything I plant	10/22/2019 4:29 PM
2	Timing is the issue - spring should work the best. And in the meantime, I would like to continue to explore alternative ideas. The rocks and large hill make it difficult to mow.	10/22/2019 8:26 AM

Q5 What actions are you taking to improve watering and decrease water use? (Check all that apply)

Answered: 14 Skipped: 0

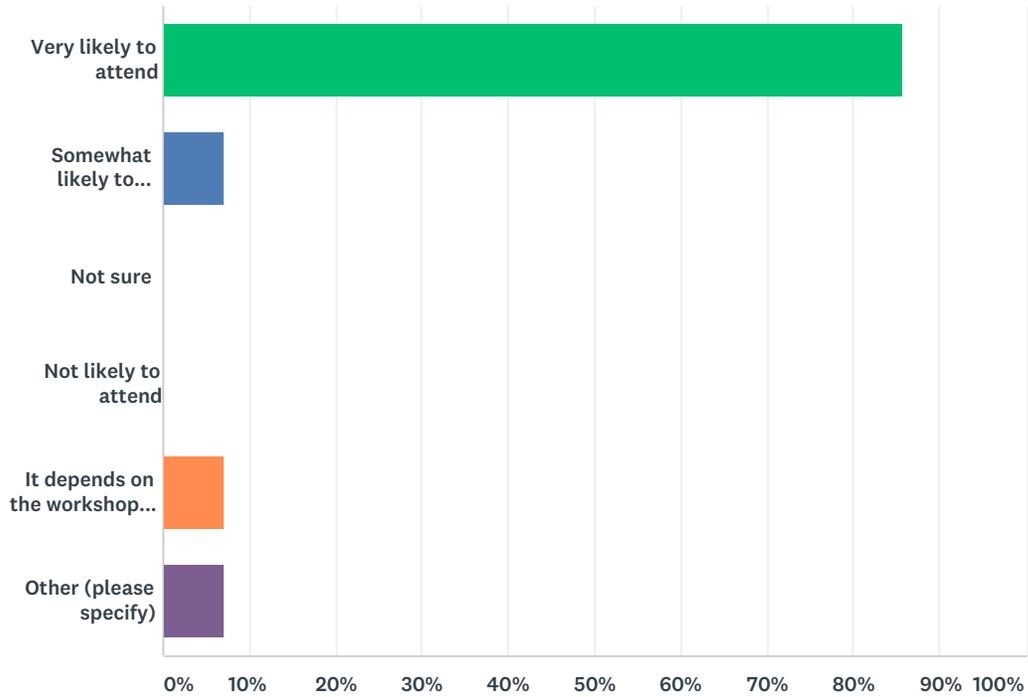


ANSWER CHOICES	RESPONSES	
I am considering a rain barrel or cistern	21.43%	3
I have plants with low water needs	35.71%	5
I water wisely	100.00%	14
I mulch/will mulch garden beds	57.14%	8
I aerate the lawn	35.71%	5
I am not considering taking actions to improve watering	0.00%	0
Other (please specify)	0.00%	0
Total Respondents: 14		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q6 Would you consider attending future Natural Yard Care workshops or demonstrations?

Answered: 14 Skipped: 0



ANSWER CHOICES	RESPONSES
Very likely to attend	85.71% 12
Somewhat likely to attend	7.14% 1
Not sure	0.00% 0
Not likely to attend	0.00% 0
It depends on the workshop topics	7.14% 1
Other (please specify)	7.14% 1
Total Respondents: 14	

#	OTHER (PLEASE SPECIFY)	DATE
1	Only if new topics are offered	10/22/2019 4:30 PM

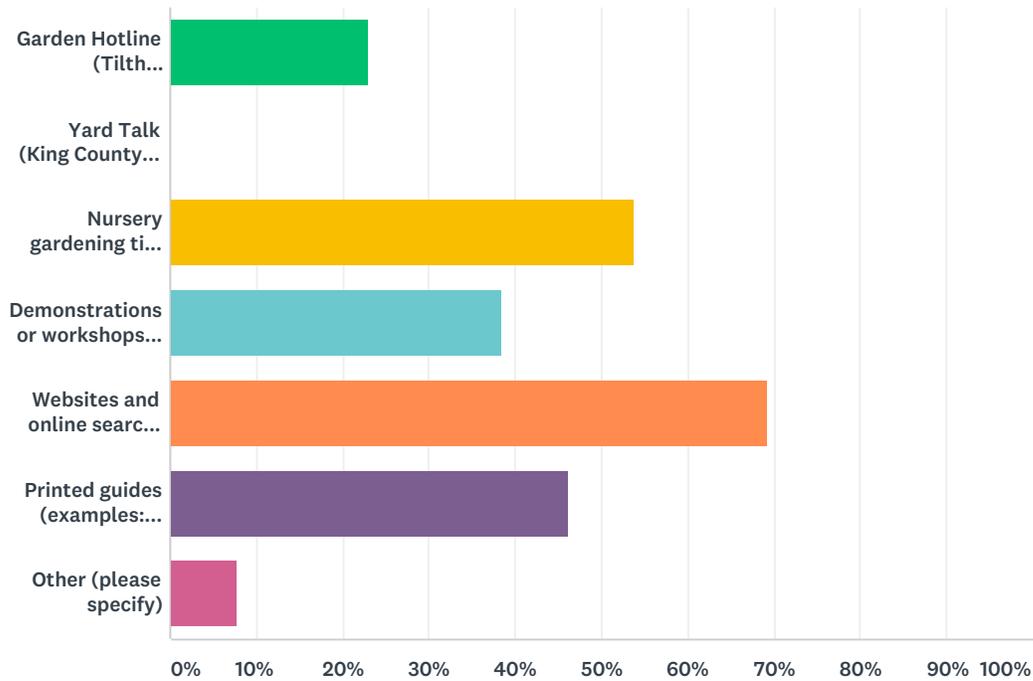
Q7 What Natural Yard Care topics are you most interested in learning about?

Answered: 10 Skipped: 4

#	RESPONSES	DATE
1	great practical knowledge	10/27/2019 4:03 PM
2	basic yard care - one of the classes I took previously, was too high level for a beginner	10/22/2019 8:27 AM
3	herb gardening	10/16/2019 10:37 PM
4	I'd like some advice on pruning and trimming bushes and trees.	10/16/2019 1:52 PM
5	Edible gardening, permaculture	10/15/2019 9:15 PM
6	vegetable gardening, aerating ideas, lawn maintenance	10/15/2019 11:36 AM
7	Organic edible gardening, Permaculture, Perennial flower garden, Food forest	10/15/2019 10:11 AM
8	What should I plant in the spring, esp drought resistant and cover plants?	10/15/2019 8:55 AM
9	The best plant options for PNW zone for different areas of the garden. Info on trees, what Bothell has chosen in town and why Guest landscaper - maybe the group who planted the Anderson school campus	10/15/2019 7:10 AM
10	Raised Vegetable garden beds	10/15/2019 7:04 AM

Q8 What gardening or lawn care resources, in addition to the City of Bothell Natural Yard Care workshops, do you regularly use? (Check all that apply.)

Answered: 13 Skipped: 1



ANSWER CHOICES	RESPONSES
Garden Hotline (Tilth Alliance)	23.08% 3
Yard Talk (King County TV podcasts)	0.00% 0
Nursery gardening tips or plant information (examples: Molbak's, Swanson's Nursery, Flower World, etc.)	53.85% 7
Demonstrations or workshops (examples: Master Gardeners, workshops in other jurisdictions, etc.)	38.46% 5
Websites and online searches for garden and plant care information (examples: naturallyardcare.org, growsmartgrowsafe.org, etc.)	69.23% 9
Printed guides (examples: Maritime Northwest Garden Guide, Gardening with Native Plants, etc.)	46.15% 6
Other (please specify)	7.69% 1
Total Respondents: 13	

#	OTHER (PLEASE SPECIFY)	DATE
1	Snohomish County Conservation District	10/15/2019 10:11 AM

Q9 If you would like to be entered into the drawing, please provide your email address. (We won't share your email address with others.)

Answered: 12 Skipped: 2

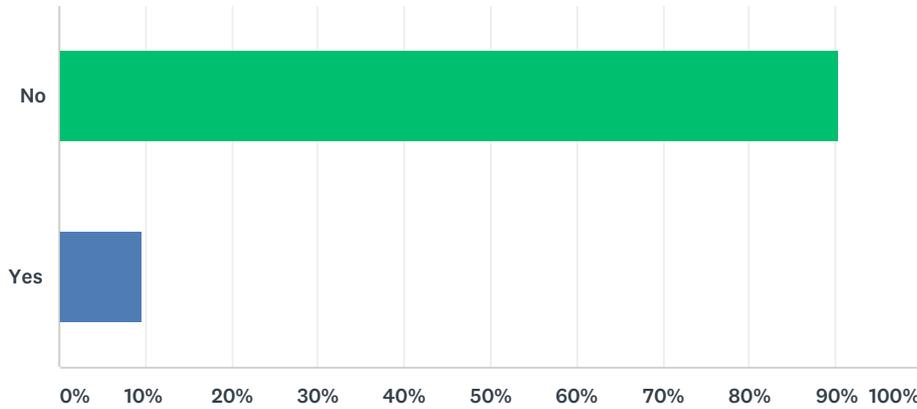
#	RESPONSES	DATE
1	[REDACTED]	[REDACTED]
2	[REDACTED]	[REDACTED]
3	[REDACTED]	[REDACTED]
4	[REDACTED]	[REDACTED]
5	[REDACTED]	[REDACTED]
6	[REDACTED]	[REDACTED]
7	[REDACTED]	[REDACTED]
8	[REDACTED]	[REDACTED]
9	[REDACTED]	[REDACTED]
10	[REDACTED]	[REDACTED]
11	[REDACTED]	[REDACTED]
12	[REDACTED]	[REDACTED]

2018 Natural Yard Care Workshops

Non-participant survey

Q1 Did you attend any of the three Natural Yard Care workshops we offered in October?

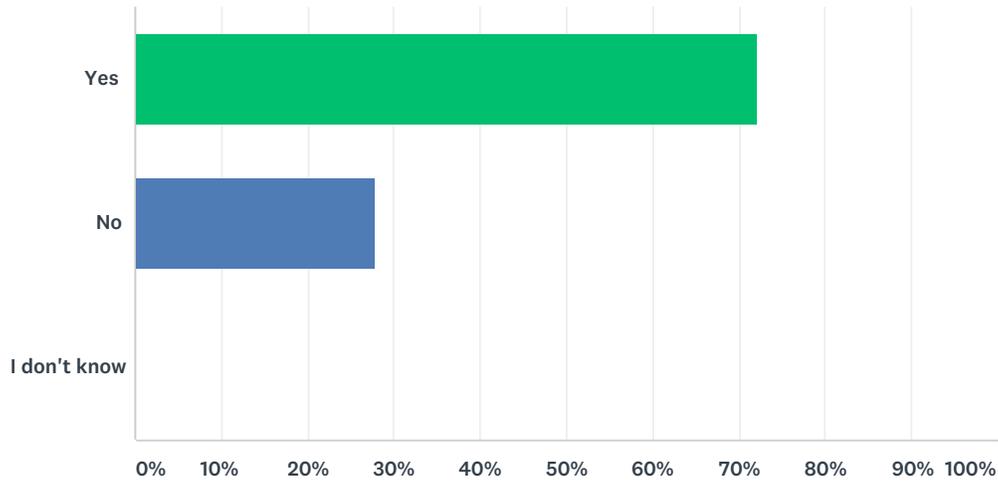
Answered: 21 Skipped: 0



ANSWER CHOICES	RESPONSES	
No	90.48%	19
Yes	9.52%	2
TOTAL		21

Q2 Do you live within Bothell's city limits?

Answered: 18 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	72.22%	13
No	27.78%	5
I don't know	0.00%	0
TOTAL		18

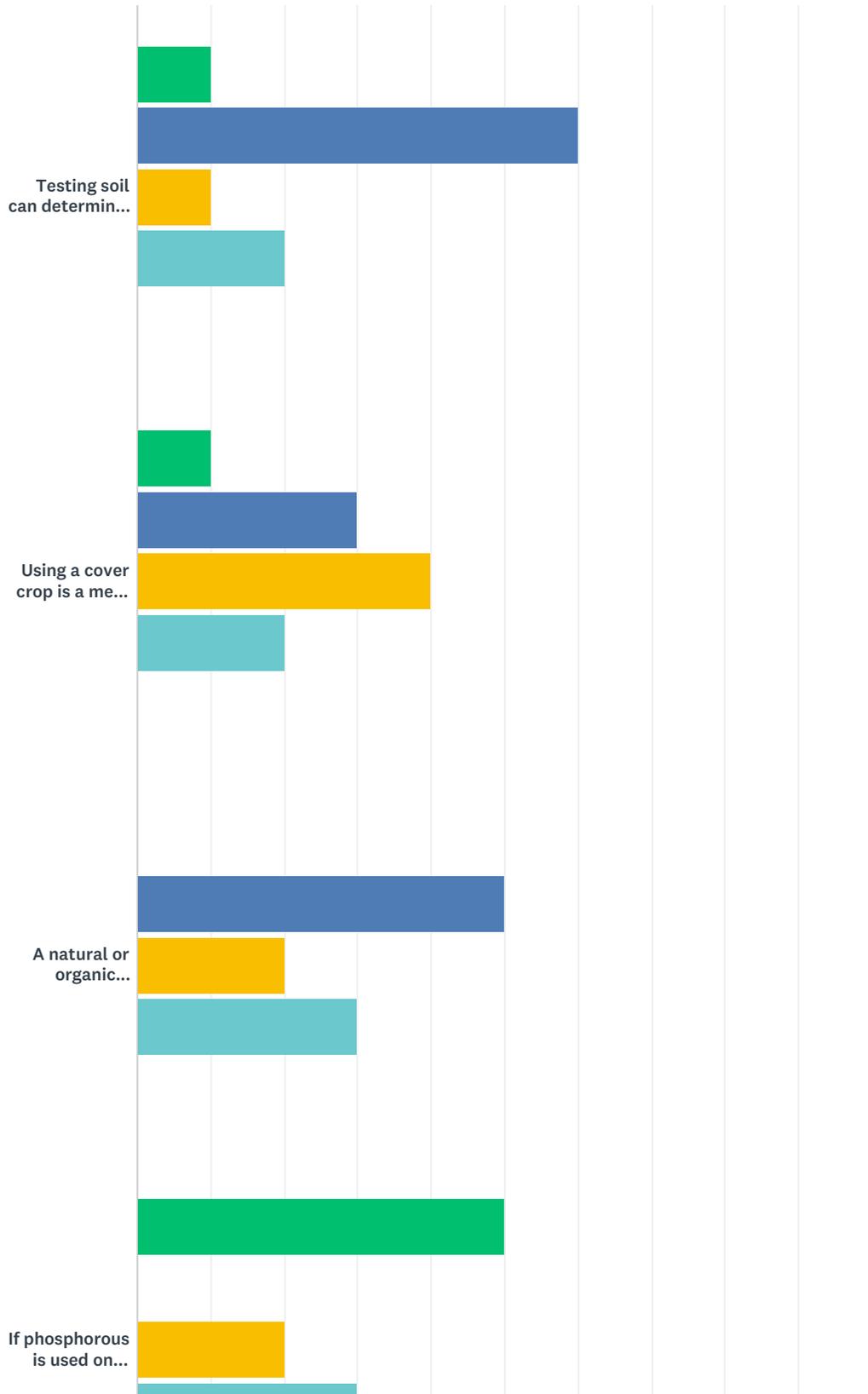
Q3 What is your zip code?

Answered: 18 Skipped: 3

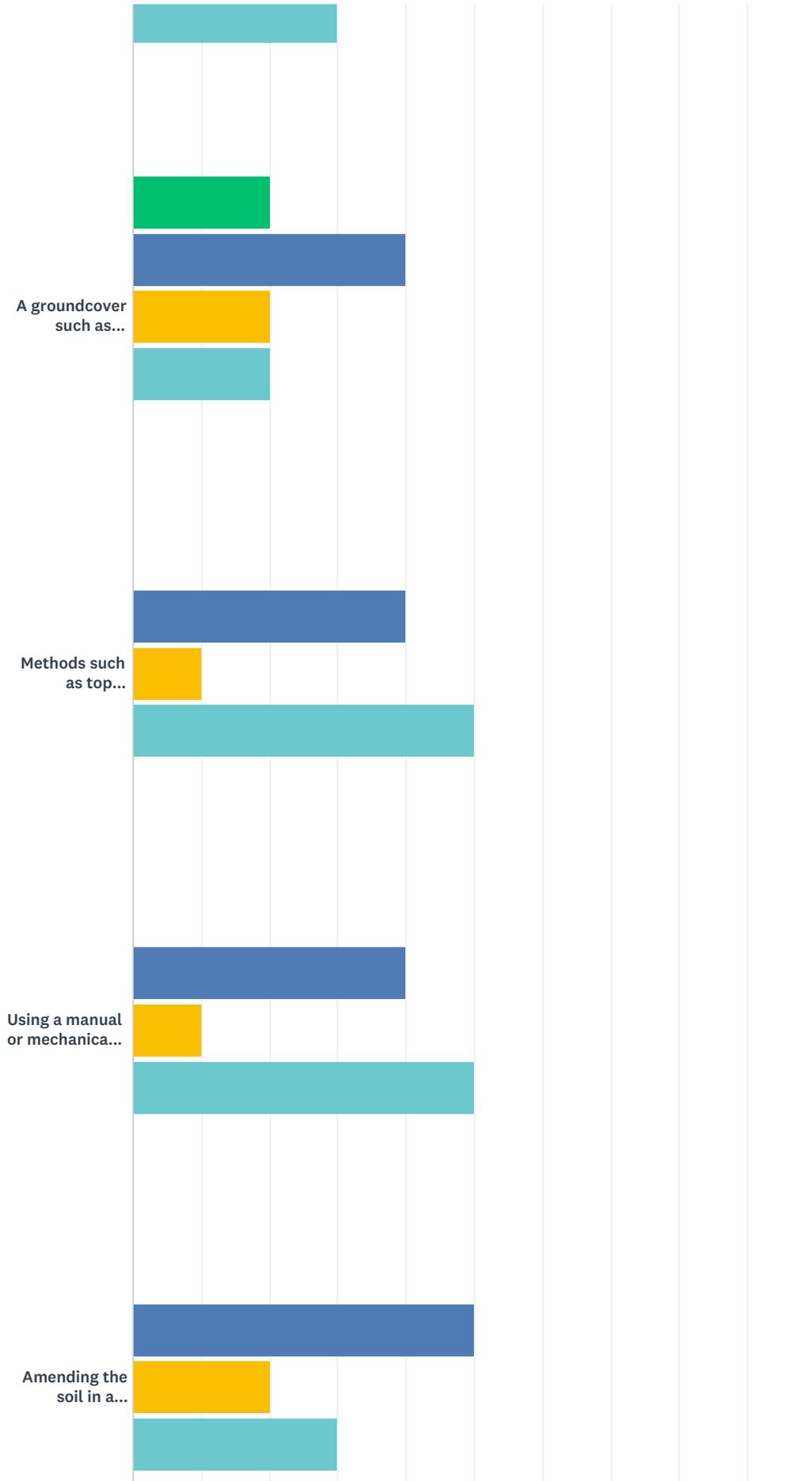
#	RESPONSES	DATE
1	98011	12/16/2018 10:31 AM
2	98021	12/15/2018 11:12 AM
3	98011	12/15/2018 12:06 AM
4	98021	12/14/2018 8:15 PM
5	98021	12/14/2018 1:46 PM
6	98012	12/14/2018 1:15 PM
7	98072	12/14/2018 1:09 PM
8	98021	12/14/2018 11:59 AM
9	98011	12/14/2018 8:16 AM
10	98036	12/13/2018 10:38 PM
11	98011	12/13/2018 9:40 PM
12	98012	12/13/2018 8:57 PM
13	98021	12/13/2018 5:57 PM
14	98021	12/13/2018 5:34 PM
15	98011	12/9/2018 9:13 AM
16	98011	12/3/2018 9:27 AM
17	98011	11/28/2018 7:55 PM
18	98011	11/28/2018 5:14 PM

Q4 Please select one answer that best describes your gardening/yard care in the past four months.

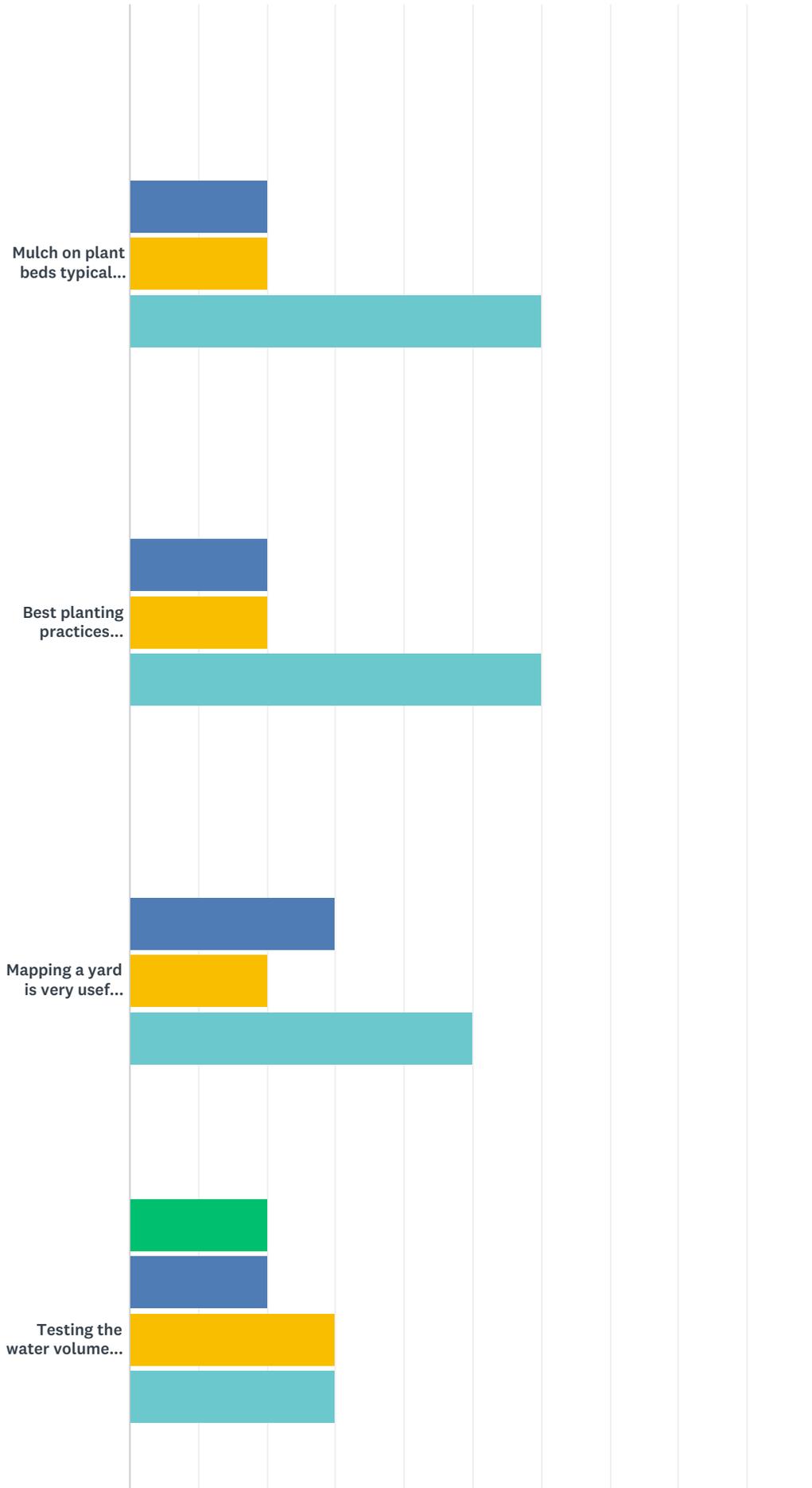
Answered: 10 Skipped: 11



Natural Yard Care & Questionnaire



Natural Yard Care & Questionnaire



Natural Yard Care Questionnaire

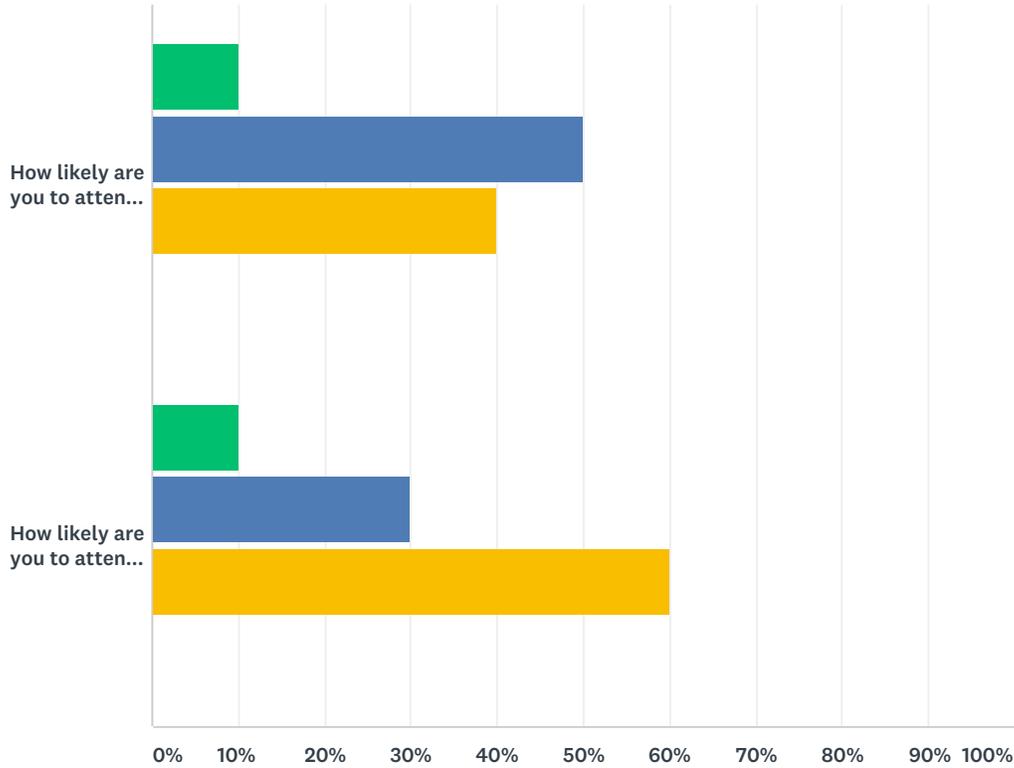


- I don't know this and/or I don't plan to do this
- I would consider doing this in the future
- I want to know more about this before deciding whether to do it
- I know this or I do this already ■ I'm unable to answer this

	I DON'T KNOW THIS AND/OR I DON'T PLAN TO DO THIS	I WOULD CONSIDER DOING THIS IN THE FUTURE	I WANT TO KNOW MORE ABOUT THIS BEFORE DECIDING WHETHER TO DO IT	I KNOW THIS OR I DO THIS ALREADY	I'M UNABLE TO ANSWER THIS	TOTAL
Testing soil can determine any need for amendments (e.g. lime, organic material)	10.00% 1	60.00% 6	10.00% 1	20.00% 2	0.00% 0	10
Using a cover crop is a means to improve soil structure in my yard/garden	10.00% 1	30.00% 3	40.00% 4	20.00% 2	0.00% 0	10
A natural or organic fertilizer can be used annually along with grasscycling	0.00% 0	50.00% 5	20.00% 2	30.00% 3	0.00% 0	10
If phosphorous is used on lawns, it leads to algae in waterways	50.00% 5	0.00% 0	20.00% 2	30.00% 3	0.00% 0	10
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	20.00% 2	40.00% 4	20.00% 2	20.00% 2	0.00% 0	10
Methods such as top dressing, applying compost, or grasscycling can maintain the condition of a lawn	0.00% 0	40.00% 4	10.00% 1	50.00% 5	0.00% 0	10
Using a manual or mechanical aerator can improve the condition of a lawn with the plugs left on top of the lawn and watered	0.00% 0	40.00% 4	10.00% 1	50.00% 5	0.00% 0	10
Amending the soil in a garden with organic matter can improve water retention or improve drainage, depending on the type of soil	0.00% 0	50.00% 5	20.00% 2	30.00% 3	0.00% 0	10
Mulch on plant beds typically nourishes or feeds the plants	0.00% 0	20.00% 2	20.00% 2	60.00% 6	0.00% 0	10
Best planting practices consider all conditions for plant placement (plant width, depth, water need, soil conditions, microclimates)	0.00% 0	20.00% 2	20.00% 2	60.00% 6	0.00% 0	10
Mapping a yard is very useful to decide where to place plants, shrubs, trees, lawn and/or groundcover	0.00% 0	30.00% 3	20.00% 2	50.00% 5	0.00% 0	10
Testing the water volume for the hose or watering technique used will lead to watering efficiently and effectively based on conditions	20.00% 2	20.00% 2	30.00% 3	30.00% 3	0.00% 0	10

Q5 Please continue with these final questions.

Answered: 10 Skipped: 11



■ Not interested at all
 ■ Would depend on the topic
■ Would depend on the day and time
 ■ Uncertain

	NOT INTERESTED AT ALL	WOULD DEPEND ON THE TOPIC	WOULD DEPEND ON THE DAY AND TIME	UNCERTAIN	TOTAL
How likely are you to attend a natural yard care class that is 2 hours long on a weeknight or weekend?	10.00% 1	50.00% 5	40.00% 4	0.00% 0	10
How likely are you to attend a "get your hands dirty" demonstration on a garden or natural yard care topic?	10.00% 1	30.00% 3	60.00% 6	0.00% 0	10

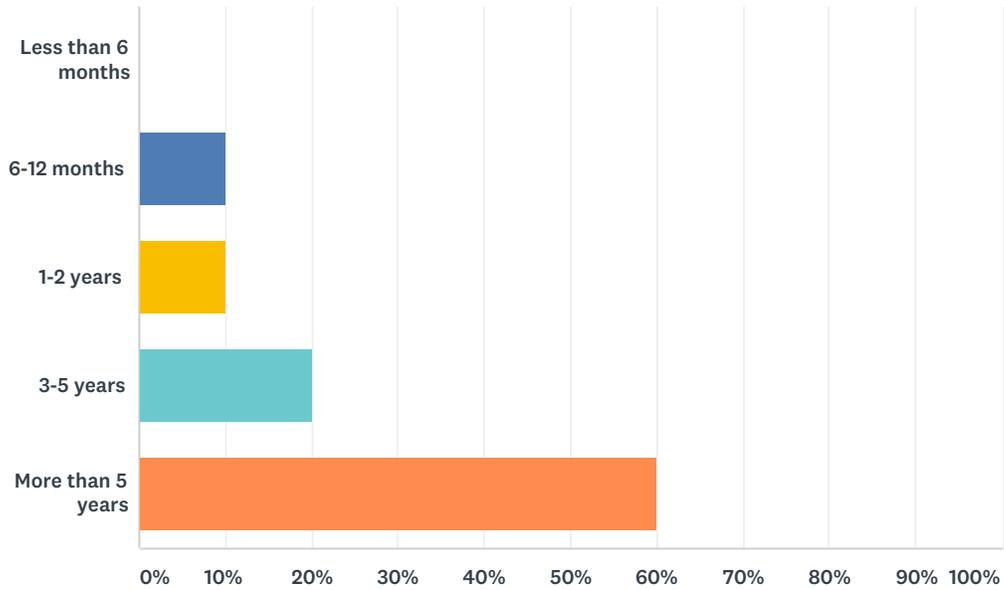
Q6 What garden or yard care topic(s) would you most like to learn about?

Answered: 7 Skipped: 14

#	RESPONSES	DATE
1	PNW local plants	12/15/2018 12:09 AM
2	natural weed control	12/14/2018 8:18 PM
3	Growing plants	12/14/2018 1:17 PM
4	Low maintenance yards that still look appealing	12/14/2018 8:19 AM
5	mole and pest control	12/9/2018 9:32 AM
6	lawns / weed control	12/3/2018 9:33 AM
7	moss control	11/28/2018 5:17 PM

Q7 Have long have you lived in your current home?

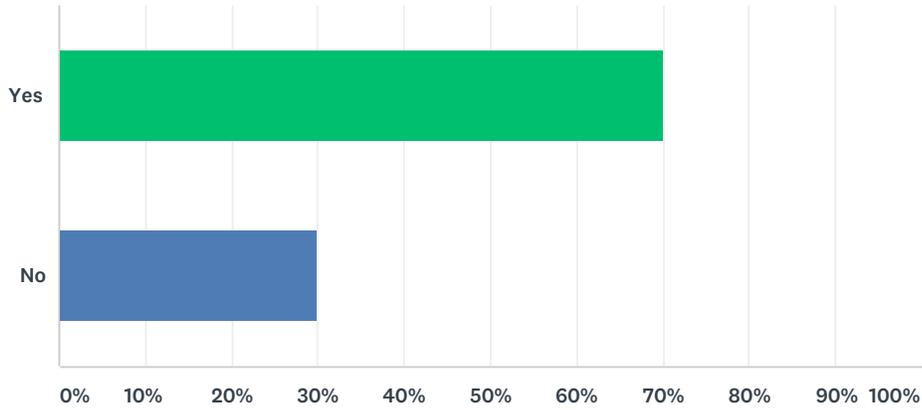
Answered: 10 Skipped: 11



ANSWER CHOICES	RESPONSES
Less than 6 months	0.00% 0
6-12 months	10.00% 1
1-2 years	10.00% 1
3-5 years	20.00% 2
More than 5 years	60.00% 6
TOTAL	10

Q8 Would you like to be entered into a drawing to win a copy of a book called Northwest Home Landscaping, which includes 48 landscape designs and over 200 plants suited for our region?

Answered: 10 Skipped: 11



ANSWER CHOICES	RESPONSES	
Yes	70.00%	7
No	30.00%	3
TOTAL		10

Q9 Please enter your email address below so we can reach you if you win the drawing. We will not share your email address with others.

Answered: 7 Skipped: 14

#	RESPONSES	DATE
█	██████████	██████████
█	██████████████	██████████
█	██████████████	██████████
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