

Visitor Use and Perceptions  
of the Washington Park Arboretum

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## **Abstract**

The Washington Park Arboretum in Seattle, Washington, was formed over 75 years ago. It is free to the public, open every day of the year, and has multiple entrances. It has been implementing a master plan and has undergone structural changes, so it is an ideal time to assess the Arboretum's audience.

Public gardens are looking for ways to better meet the needs of their visitors. Audience research can help gardens understand their visitors' needs and motivations, and provides valuable information when making decisions within an institution.

This study looks at who visits the Washington Park Arboretum, why they come, and how they think about the Arboretum. Over four months in fall 2010 and winter 2011, 249 visitors participated in interviews and surveys at the Arboretum. While fall and winter are considered the offseason at gardens, the audience can be considered a core group of visitors.

## **Key Findings**

- 23% of visitors were 20-29 years old. This is uncommon in public gardens.
- 30% of respondents live in the same zip code as the Arboretum. Another 20% live in three neighboring zip codes. In general, these local visitors use the Arboretum as a park.
- 37% of respondents were visiting alone. This is an uncommonly high number of solo visitors for public gardens and museums.
- 85% of respondents had visited the Arboretum before.

- Visitors suggested improvements in wayfinding more than any other improvement, and visitors who had never been to the Arboretum before were more likely to ask for improved wayfinding.
- Visitors said they visit the Arboretum for general enjoyment, to use the Arboretum as a setting for an activity, and for the plants and landscape.
- People described the Arboretum with mentions of plants, emotions, size, and referring to it as a park.

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## **Introduction**

Public gardens, including botanic gardens and arboreta, are places where people go for a day outdoors, to learn about plants and gardening, to view special exhibits or plant collections, to enjoy the company of friends, or for psychological restoration. As sites of informal learning, gardens, like museums and libraries, provide a valuable educational resource to the community. They also provide a resource for beauty, rest, and enjoyment.

Audiences to public gardens vary from place to place, and season to season. Each garden's audience is unique. In order to serve their audience in a focused and targeted manner, a garden needs to know what their audience wants from a typical visit. Through audience research, gardens can identify characteristics of their visitors.

Audience research, also known as visitor studies or audience evaluation, is the act of examining and analyzing visitors to a particular institution. At museums (including public gardens), audience research has been a growing field in recent decades. Researchers have developed strong methods for evaluating and understanding visitors, and this research has benefited museums and gardens around the world. Using targeted methods, informal learning settings have been able to learn a great deal about their audiences: who they are, what they come for, what their motivations are, what their expectations are, what they learn on their visit, and if they are satisfied with their experience.

This study, performed at the Washington Park Arboretum (WPA), looks at the Arboretum's visitors for the first time in decades. Several recent changes that

have occurred at the Arboretum make this an ideal time to reevaluate their audience. First, the Arboretum has been implementing its Master Plan, which has meant the removal of many plants and the creation of a new themed garden exhibit. Second, the Arboretum combined with the Center for Urban Horticulture (CUH) under the umbrella of the University of Washington Botanic Gardens (UWBG). These two organizations formerly had separate missions, and they are now operating under the same mission: *Sustaining managed to natural ecosystems and the human spirit through plant research, display, and education* (University of Washington, 2011). These changes mark an important time in the Arboretum's history, and it is fitting that an audience research study should be undertaken at this point. Data from this study can help advise the Arboretum as it moves forward.

## **Research Questions**

In order to better understand the audience of the Washington Park Arboretum, this study attempts to answer the following questions:

- Who visits the Arboretum?
- Why do visitors come to the Arboretum?
- In what ways can the Arboretum improve visitors' experiences?
- How do visitors think about, or perceive, the Arboretum?



# Literature Review

## Museum visitors

Public gardens are similar in mission and in practice to other informal learning environments, such as museums. “Museum” is a broad term, which encompasses art, history, culture, and natural history museums, as well as science centers, children’s museums, living history museums, zoos, aquaria, gardens and arboreta, and more. While the subject matter, collection, and specific goals of each organization is different, they all attempt to educate and preserve through display and collection.

In general, the “typical museum visitor” is white, middle class, visiting with a social or family group, is educated, and aged 35-50 (Falk & Dierking, 1992). In addition, museum visitors in the summer tend to be infrequent visitors, and often tourists. Winter visitors are more likely to live locally, and be frequent museum goers.

In public gardens, as in museums, the general assumption is that visitors are older, white, female, educated, and middle to upper class. While this may be true in many cases, not all gardens see these patterns in their visitors.

## Garden Visitors

### Visitor Age

When gardens survey their audience, the one consistent set of data that they track is demographics. The most basic of these are age and sex. Demographics also include where visitors live, their income, how often they visit, whether they are members, and so on. While there is a limited amount a garden can learn from demographics alone, they are an important starting point in any audience research study. Of the studies cited in this report, most examine demographics. For a comparison on these studies, see Table 1.

**Table 1: A comparison of visitor demographics from previous garden studies**

| <b>Author, Year</b>     | <b>Garden</b>             | <b>Visitor Age</b>   | <b>Frequent Visitors?</b>  | <b>Local Visitors?</b>                                 |
|-------------------------|---------------------------|--|--|--|
| Twight, 1968            | Washington Park Arboretum | 21-35 = 29%  | n/a  | 71% live in Seattle                                    |
| Bennett, 1995           | BBG and NYBG              | 26-45 = 60%  | 12% first visit  | n/a – all are “urban residents” but no info from where |
| Connell, 2004           | 13 gardens in UK          | <40 = 15%<br>40-60 = 48%<br>>60 = 36%                        | 47%: 1/month or more<br>47%: 1-3/year                              | 55% near home<br>45% tourist                           |
| Hood, 1988              | Holden Arb., Ohio         | 35-54 largest<br>>55 2 <sup>nd</sup> largest<br><35 smallest | Winter: 5% first visit<br>Fall: 20% first visit                    | Winter: 70% local<br>Summer: 50% local                 |
| Hood and Roberts, 1994  | Chicago BG                | >55 = 30-50%<br>18-34 = 17-22%                               | Older are frequent visitors, young are likely to be on first visit | n/a  |
| Ballantyne, et al, 2008 | Mt. Coot-tha, Australia   | 30s = 32%  | 52%: 4+ visits<br>27%: first visit                                 | Local = 72%<br>Non-local = 28%                         |

The audience of an Australian garden, Mt. Coot-tha, was young (32% were in their 30s), which the authors point out is consistent with other Australian garden surveys. Apparently, the trend across Australian gardens is that the age group 25-34 is the highest represented, followed by 35-44 year-olds (Ballantyne, Packer, & Hughes, 2008). The reverse was true in the UK. Almost half of all visitors to 13 British gardens were middle-aged (40-60), and people under 40 were the least represented (Connell, 2004). The garden culture in the UK is different from new world countries, which may help to explain the age differences in their visitors.

In the US, the Holden Arboretum near Cleveland, Ohio found the largest age group to be 35-54 year-olds, and the next largest were the 18-34 year-olds (Hood M. G., 1988). In a study at the Chicago Botanic Garden, 30 – 50% of visitors were over 55, and 18-34 was the smallest represented age group (Hood & Roberts, 1994). At the Washington Park Arboretum in Seattle, an audience study performed in 1968 found that the visitors to the Arboretum at that time were somewhat evenly distributed by age, with the largest group (29%) being those aged 21-35 (Twight, 1968). Many of these studies are not recent. However, since so few audience surveys

are published, whether for proprietary reasons or because they are seen as internal tools, these are still some of the most comprehensive studies in the literature.

Age can be correlated to other data obtained through audience research. It is not unusual for older and younger audiences to use the gardens in different ways. For instance, at the Chicago Botanic Garden, age was the biggest predictor of motivations and use of the garden (Hood & Roberts, 1994). Young people were looking for fun, informal outdoor activities, and older audiences were there for planned events. In Australia, older visitors were more likely to come for enjoyment of plants and gardens than young visitors were (Ballantyne, Packer, & Hughes, 2008).

#### Local and Frequent Visitors

Another common demographic sought by audience research is whether visitors have come to the garden before, and if so, how often. This can often relate to where the visitors live, because local visitors are more likely to be repeat visitors. In previous studies, gardens have cited surprise at how many visitors are repeat visitors (Hayward, 1993). This demonstrates that even simple demographics cannot be known without asking, and that it is easy to have false impressions about the garden audience.

In the Australian study, 73% of those surveyed were local and repeat visitors. In the UK, 47% of people visited gardens 12 times per year. 55% of visitors were local, and 45% identified as “tourists,” although it is unclear what distance from the gardens is considered “local” (Connell, 2004). At the Holden Arboretum, 70-80% of visitors were locals, and most had been to Holden before. Most of the visitors were from the surrounding area, but in the summer locals only made up about 50% of visitors (Hood M. G., 1988). Twight (1968) found that 71% of WPA visitors were Seattle residents.

Most gardens have shown that their visitors are primarily local, and the majority are repeat visitors. A study on open space and wilderness visitation states that people choose which natural areas to go to based primarily on proximity to

their home. In particular, walking distance was a large indicator of where they chose to visit (Thompson, Aspinall, Bell, & Findlay, 2005). While wooded areas are not necessarily equivalent to public gardens, this still demonstrates that people chose where to go based on location and proximity.

These studies were performed on three continents, in different decades. Some of the data are very similar to each other, such as the majority of visitors being local and frequent and/or repeat visitors. On the other hand, some data are extremely dissimilar, such as age. In the US, it appears that garden audiences trend over 50, in the UK they are over 40, and in Australia they are much younger. Each garden is of course different, and the garden culture of the country and local area will also make a large difference in who visits. The season of the study makes a difference as well, as more locals visit in the winter and more tourists visit in the summer. Therefore, while it is important and useful to look at global or regional patterns in garden visitation, each garden must perform their own studies to understand the demographics and psychographics of their audience.

#### Group Size and makeup

Group size, particularly whether people are alone or not, and makeup, which generally looks at the ages of the group members, can be helpful in showing how visitors use or experience the garden. For instance, if visitors come alone, they are less likely to be using the garden as a venue for socializing, unless they are coming for the purpose of meeting people at an organized event (Hood & Roberts, 1994). In the Australian study, only 2% of visitors were alone, whereas in the UK study, 15% of visitors were alone. Ballantyne, Packer, & Hughes (2008) claim that since so few visitors were alone, gardens facilitate social interaction. However, other gardens have a higher percentage of solo visitors. A study performed at two gardens in New York City found that almost a quarter of visitors came alone (Bennett, 1995). It seems that some gardens are sought for solitude, peace, or a safe place to walk alone, while others are used a setting for socializing.

## Visitor Motivations

Simply knowing visitors demographics by no means explains why these people choose to visit a public garden, or what they do there, or how to address their needs during their visit. Age alone does not explain people's motivations in garden visitation. John Falk states, "to get the complete answer to the questions of why people visit museums, what they do there, and what learning/meaning they derive from the experience, requires a deeper, more holistic explanation" than visitor demographics can provide (Falk, 2009).

John Falk and Lynn Dierking (1992) divide visitors to museums into three main types: social or recreational, educational, and reverential visitors. Social or recreational visitors are looking for a space to facilitate an experience with other people, or to partake in an activity. In the case of gardens, these might include visitors who are walking and talking with friends, dog walkers, or people taking an art class. Their focus is not on the content of the collection; rather, they are using it as context for an experience. Educational visitors are looking for a learning experience, either casual or formal. And reverential visitors are seeking an experience of an emotional nature, such as escape from their daily lives, stress reduction, appreciation of beauty, or awe towards real artifacts.

Falk later describes in greater detail that visitors can be understood by looking at their identity to help explain their motivations and expectations of a visit. The museum visitor identities he describes are: explorer, facilitator, experience seeker, professional or hobbyist, and recharger (Falk, 2009). *Explorers* visit to learn or see something new and tend to let their experience be guided by the search for something interesting. *Facilitators* are primarily visiting to ensure that the others in their group are learning or enjoying themselves. *Experience seekers* could be classified as tourists (regardless of where they live) because they are looking to check an experience off a list of things they should see or do. *Professionals or hobbyists* have a strong interest and knowledge about the subject matter and are looking to deepen that knowledge. Finally, *rechargers* are motivated by the peace, beauty, or spiritual connection they will derive from the collection or the location.

Most people represent a combination of these identities. Understanding visitor identities or psychographics gets a garden one step closer to being able to serve the needs of their audience.

Other authors have described motivations for participation in leisure activities. There are many theories, and many ways to divide motivations. Some of the other authors who have of described leisure motivations include:

- Beard and Mounir: Psychological, educational, social, relaxation, physiological, and aesthetic motivations.
- Driver: Motivated by achievement/stimulation, autonomy/leadership, risk taking, equipment, family togetherness, similar people, new people, learning, enjoy nature, introspection, creativity, nostalgia, physical fitness, physical rest, escape personal and social pressures.
- Doering and Pekarik: Motivated by object experiences, cognitive experiences, introspective experiences, and social experiences
- Packer and Ballantyne: Motivated by learning and discovery, passive enjoyment, restoration, social interaction, and self-fulfillment (Falk, 2009).

All of these theories have merits when describing arboretum visitors. For the purposes of this study, a combination of these categories has been used to describe why visitors came to the Washington Park Arboretum. See Appendix C for descriptions of the categories used in this study.

### Garden Visitor Motivations

Previous audience research studies at gardens have found some trends in why people visit, and what they do there. In general, people visit seeking a nice experience outdoors, and few are visiting expressly to learn.

The 1968 study at the WPA showed that visitors were driven by aesthetics (“flower and plant appreciation”) and recreation (“environment-related use”) (Twight, 1968). Fewer visitors said they were motivated by specific goals (such as learning, meetings, or getting landscaping ideas), or by specific activities (such as

games, exercise, or picnics.) The visitors surveyed valued the variety of plants at the Arboretum, as well as the peaceful and relaxing atmosphere.

Visitors to two urban gardens in New York City said they came to the gardens purposefully to relax and reduce stress, and for inspiration (Bennett, 1995). At the Chicago Botanic Garden, visitors seemed to enjoy leisure experiences that were fun and educational (Hood & Roberts, 1994).

Garden visitors in the UK came for a day out, to enjoy the garden, and for interest in plants and gardens. When asked about their overall interest level in plants and learning about plants, most said they had a “general interest in gardening” (70%) some were just “seeking a pleasant day out” (20%) and a few had a “specialist horticultural interest” (10%). Visitors to these gardens have some interest in plants, and they see public gardens as a good way to spend their free time.

Age was the biggest predictor of visitor motivations and behaviors at the Chicago Botanic Garden (Hood & Roberts, 1994). The two most notable groups were older people (55+) and younger people (18-34). Young visitors came to enjoy, have fun, take pictures, and exercise. Older visitors came for a specific event, tourism, and generally didn't visit for rest or relaxation. Both groups enjoyed visiting places with diverse programs and events. They both wanted social places, where lots of different types of people could participate in activities.

Most studies show that visitors do not actively use gardens as an educational resource. Ballantyne, et al, (2008) found that visitors to Mt. Coot-tha rated “learning and discovery” of low importance. Visitors' highest rated “reasons given for visiting Botanic Gardens were: to enjoy oneself; to admire the garden's scenery; to spend quality time with family or friends; and to enjoy being outdoors/in nature.” (Ballantyne, Packer, & Hughes, 2008). The authors state that these findings were similar to previous garden visitor studies.

However, researchers have found that certain groups of the visiting population are more likely to come for learning than others. For instance, Hood and

Roberts (1994) found that while neither young nor old visitors to the Chicago Botanic Garden showed much interest in information about gardening, but young visitors did show an interest in ecology, conservation, and unusual plants.

Ballantyne, Packer, & Hughes (2008), found that first time visitors (as opposed to frequent or repeat visitors) were more likely to come for educational reasons. For this reason, these authors advocate for the creation of a variety of interpretive experiences to meet different learning goals.

### **What visitors value at public gardens**

People value some garden experiences and features more highly than others. Some features that are generally enjoyed are water and floral color (Camenga, 2003) (Schulhof, 1990). At Longwood Gardens in Pennsylvania, visitors rate sensory experiences very highly. They prefer color in the landscape, and enjoy a landscape with a variety of patterns, shapes, and fragrances. In this study, social interaction was rated low on a scale of importance to the visitor experience (Camenga, 2003). Longwood is a large estate garden with highly manicured landscapes and a large conservatory. At another garden, North Carolina Botanic Garden, researchers looked at how visitors reacted to a naturalistic design. Visitors who had been to the garden before, or had an interest in ecology, native plants, or who “came to learn” had a high appreciation for native plant habitat exhibits. Visitors who came with passive motives, such as walking or looking at scenery, didn’t like the habitats or were confused by them (Schulhof, 1990).

Studies on landscape preference show that people are drawn to landscapes that have spaced trees with smooth ground, like in a park. People generally do not prefer vast landscapes with little variation, or those that are dense and have low visibility. Kaplan, Kaplan, & Ryan (1998) have described the four elements of landscape preference to be *coherence* (orderly, scenes that make sense to the viewer), *complexity* (rich and varied), *legibility* (memorable, with distinct features), and *mystery* (intriguing, compelling, a promise of more around every corner).



Schulhof (1990) claims that elements of mystery in a landscape stimulate curiosity and exploration in a visitor, two attitudes that are sure to make a garden visit engaging and memorable.

The garden features that visitors prefer sometimes vary from garden to garden, however. At Longwood, a formal estate garden, visitors enjoy the large fountain displays (Camenga, 2003), while at the Morton Arboretum, an arboretum with natural landscapes, visitors preferred scenes that were dense and with natural trees and shrubs, and disliked formal or manicured scenes (Schroeder, 1993). At two gardens in dense urban areas, visitors preferred scenes with the fewest manmade elements (Bennett, 1995). Perhaps this was because they were seeking an environment wholly different from the one usually around them.

Variety in garden design, or diversity of plants and terrain are often named as one of the features of highest importance to visitors (Connell, 2004) (Schroeder, 1993). “[T]he variety of different settings available at the Arboretum seems to be an important aspect of people’s mental images” of that arboretum (Schroeder, 1993). When asked to describe their favorite locations at an arboretum, visitors often used words like “diverse” and “variety” to describe them. Studies have demonstrated the role of novelty and mystery in preferred landscapes (Schulhof, 1990) (Kaplan, Kaplan, & Ryan, 1998). A scene may be considered novel if it contains plants or elements of design that are new to the visitor, something they have never seen before.

Many people enjoy walking, contact with nature, and relating memories of people, places, and events from their own lives. They like to be in settings that are connected to their life, and do not necessarily see landscapes as just something to be viewed (Schroeder, 1993). Familiarity with the landscape, or knowing what to expect, increases people’s enjoyment or appreciation of the garden (Falk & Dierking, 1992)(Schulhof, 1990). This is because people have a deep need to understand their surroundings, and if they do not, a great deal of mental energy is spent trying to make sense of them (Kaplan, Kaplan, & Ryan, 1998). This mental strain decreases a visitor’s ability to enjoy the garden.

## **How visitors feel in gardens**

Over the last few decades, the field of environmental psychology has emerged and grown, looking at why people like and connect to certain places. Studies have demonstrated that people receive benefits, beyond enjoyment, from being in nature. These benefits may be physical, emotional, or cognitive. Garden studies have shown that visitors often refer to a sense of peace or tranquility during their visit, and that this is can be something they intentionally come to experience (Bennett, 1995).

“Contact with nature may be directly beneficial to health,” states Frumkin (2001). Natural scenes make people feel less fear and anger, and increases alertness, attention, and cognition. In general, “people feel good around plants.” Frumkin writes about the physical benefits viewing and experiencing planted settings has on human health. Surgery patients with a view of trees recovered faster than those that had a view of a wall. Prisoners with an outside view became ill less often than those with a view of the internal courtyard with no vegetation (Frumkin, 2001). The theory is that the calming effects of viewing nature reduce stress, increase relaxation, and therefore allow the body to function more smoothly.

Early studies in environmental psychology primarily looked at the effects of “viewing” nature, either as real landscapes or as photographs. Indeed, viewing nature can improve physical and emotional states by increasing energy, reducing anger and fatigue, and enhancing pleasure and ability to concentrate. Going further, being in nature has even greater affect than merely looking at nature. Being in nature involves all the senses, not just sight but also smell, hearing, and touch, as well as the feeling of being “surrounded” by nature. David Cumes describes “wilderness rapture” as the feelings of awe, wonder, humility, renewal, and connection to nature (described in Frumkin, 2001). Lee, Park, Tsunetsugu, & Kagawa, (2009) measured subject’s stress while in either urban or forested outdoor settings. The subjects reported feelings of comfort, refreshment, and relaxation in the forest setting. In addition, physiological stress responses were measured. Subject’s pulse, blood pressure, and salivary cortisol concentration (a stress

indicator) were all lower when subjects were in the forest setting than when they were in the urban setting. The physical and mental benefits of being in nature are generally short-lived, however (Frumkin, 2001).

## Restoration

Environmental psychologists Kaplan, Kaplan, & Ryan (1998), refer to the relaxing feeling brought about from being in nature as *restoration*. Restoration is a psychological term meaning recovery from stress and mental fatigue brought on by the demands of life. Stress can come from many sources, and being in restorative settings can alleviate both long-term and short-term stresses. Wooded areas can play an important role in restoration. As one focus group participant stated, visiting natural areas “gets you away from everyday life” (Thompson, Aspinall, Bell, & Findlay, 2005).

Restorative settings do not necessarily have to be natural, but natural settings easily meet the requirements of a restorative place (here, “natural” means any place with lots of vegetation, not necessarily a place far from urban areas). People prefer natural settings to manmade ones, and natural places lend themselves to being used in ways that foster restoration (Kaplan, Kaplan, & Ryan, 1998). These uses may be active, such as hiking, fishing, or gardening, or passive, such as bird watching, or sitting.

Restorative settings fulfill four characteristics: Being away, extent, fascination, and compatibility. *Being away* is a literal separation from the place creating mental fatigue (such as work or traffic). *Extent* means that the setting is large enough that the edges can’t easily be seen, which creates a feeling of being in a different world altogether. *Fascination* includes interesting things to look at, and encourages thinking and curiosity. Finally, *compatibility* says that the setting meets the personal inclinations of the individual. A setting that meets all other requirements but that is unpleasant in some way to the individual will not be restorative (Kaplan, Kaplan, & Ryan, 1998).

Environmental psychology can be applied to public gardens, by telling us why people visit gardens, what they get out of the experience, and in what ways gardens can better serve their visitors. For instance, a study at two urban gardens in New York City (Brooklyn Botanic Gardens and New York Botanic Gardens), found that residents of urban areas derive some stress reduction from visiting public gardens, even gardens in dense urban settings. The stresses of living in an urban environment include pollution, noise, crowding, and traffic, in addition to whatever individual stresses a person might be dealing with. People can cope with stress in two ways, either by escaping or removing the stressor, or by dealing with their feelings about a stressor. Gardens help with the latter, because they help people feel restored. Their lives and stresses are not changed, but a garden visit helps them temporarily deal with stress. And indeed, 91% the visitors to these gardens self reported a reduction in stress levels from the beginning of their visit to the end of their visit (Bennett, 1995).

Gardens provide a much needed respite from people's stressful daily lives. Some researchers consider restoration to be a primary reason that people visit gardens (Ballantyne, Packer, & Hughes, 2008). But how do you assess the impact a garden has? And how can gardens use this information? The next section will discuss how, and why, to perform audience research.

## **Audience Research**

All museums, including gardens, have recently been shifting their focus from preservation of the collection to the visitor's experience with the collection. As Lisa Roberts (1990) states, "without viewers, our collections become but laboratories, repositories, and preserves." The audience is as important to the preservation of the institution as the institution is to the preservation of the collection.

Audience research is the process of collecting information, analyzing this information, and reporting the results within the context of the individual garden (Beckmann, 2000). "Public gardens, and their funders, need to know whether

projects and programs are achieving intended goals and impacts and if not... how they could be improved” (Warsowe, 2011). Audience research is a way to get this information directly from the visitors. It ensures that programs are not built on assumptions about what the visitors know, want to know, or how they learn.

Diamond, Luke, & Uttal state, “in most instances, evaluation conducted in informal learning environments is intended to inform practice” (2000). Audience research isn’t just about finding information that will be interesting. Studies are best when they are performed with a specific reason or purpose.

Audience research is a tool that can answer questions about who the garden audience is (descriptors such as demographics, raw numbers of visitors); their motivations and interests; expectations about their visit; satisfaction; if a program or display is used as intended; how people spend their time in the garden; as well as many other things.

It has been well established that garden audiences vary from garden to garden. Therefore, each garden can benefit from performing visitor studies. In fact, “since visitors differ by season in their expectations of arboretum content... a one-time or one-season assessment of an arboretum’s audience is insufficient to gauge the diversity of visitor responses” (Hood M. G., 1988). While all museums experience seasonal changes in visitorship, public gardens are an extreme example of this. Winter and fall are particularly slow times for gardens, particularly those without indoor exhibit spaces. Any study that addresses only one season, whether it is peak or off-peak, probably doesn’t tell a complete story about the visitors.

While evaluation isn’t an end in itself, it can be a part of the process of constant improvement. An evaluation is only useful if it is used. Early in the process the institution and evaluator benefit from understanding how the data will be used, and what is possible to achieve or even to change (Vondrasek, 2000).

When study results have been applied, gardens have been able to improve visitor experiences, interpretation, or communications. For instance, in Indonesia, a garden learned that a good portion of its audience were tourists from the

Netherlands (Beckmann, 2000). This prompted the garden offer multi-lingual signs and tours. The Chicago Botanic Garden study showed that their audience was largely over 55 years old. This lead the garden to add family programming because they felt the older audience would continue to be regular visitors. Goodstay Gardens in Delaware went in a different direction. They also found that they had a senior audience, but chose to stop putting limited resources into children and family programming because they weren't reaching very many people. Finally, the US National Arboretum found in 1997 that about 75% of visitors were repeat visitors. They wanted to increase the number of new visitors, so they created events that would draw people in. They also focused on increasing visibility with tourism publications (Vondrasek, 2000).

On a more basic level, audience research can provide a case for support for a public garden. A study at University of California Davis's Davis Arboretum found that its visitors saw the Arboretum as an important place to connect and learn about nature. This study gave the Arboretum better standing at the University, as well as provided a basis for setting priorities (Cary & Socolofsky, 2003). Studies that provide fundamental understanding of the garden audience can be used as a backdrop for future studies, as well as inform practice. Every study builds on the last. With good planning and execution, audience research can tell a detailed story about garden visitors: who they are, why they come to gardens, what they want from their visit, what they learn, and whether the garden is creating a memorable experience for its visitors.

## **Methods**

I performed a visitor study at the Arboretum using semi-structured interviews and questionnaires that were administered to visitors in order to learn more about their use and perception of the Arboretum. This section describes this process.

## **Study Site Background**

The Washington Park Arboretum (WPA) was conceived in 1934, and in 1936 James Frederick Dawson completed a design for the Olmsted Brothers design firm. The Olmsted Brothers are part of a family of extremely well known and prolific landscape designers. The brothers' father, Frederick Law Olmsted, designed Central Park and many other parks around the nation (BOLA Architecture + Planning; Karen Keist/Landscape Architects, 2003). Olmsted designs are known for being naturalistic while still feeling inviting and peaceful. The WPA collection was originally laid out taxonomically, which means that the plants were organized by genetic relationships rather than country of origin or cultural requirements. However, this model has changed recently with the addition of the Pacific Connections Garden, a series of exhibits showcasing plants native to eco-regions around the Pacific Ocean.

Today, the WPA is 230 acres of mature trees and shrubs. The collection is owned and maintained by the University of Washington, while the land is owned by the City of Seattle and operated by the Parks Department. Parks maintain all turf

and infrastructure. A group called the Arboretum Foundation performs fundraising activities, advocacy, and operates the gift shop at the Graham Visitor Center.

The Arboretum is open every day, is free, and has no single point of entrance. There are fences on a few sides, but most of the Arboretum is not fenced. A major road, Lake Washington Boulevard, runs north/south through the center of the Arboretum. Many commuters use this road each day, as it provides access to SR 520, a major freeway and bridge across Lake Washington. A second road, Arboretum Drive, runs parallel to Lake Washington Boulevard through the eastern portion of the Arboretum, but is closed to through traffic.

Because the WPA is porous in nature, has a road through it, and does not have an entrance gate or charge a fee, visitors are able to come and go at any time for any reason. Counting them is difficult, but the audience has been estimated at 250,000 visitors per year (University of Washington, 2011).

The WPA is home to many important plant collections. Some key collections are the Japanese maples, Asiatic maples, hybrid rhododendrons, camellias, mountain ash, and larches. In addition, the Arboretum showcases plants in specialized gardens, such as the J.A. Witt Winter Garden, the Pacific Connections Garden, and the Woodland Garden. Ecosystems represented include forest, wetland, shoreline, and grassland. Seasonal highlights include witch hazels in winter, azaleas in spring, hydrangeas and flowering trees in summer, and colorful foliage in fall. The Arboretum collection houses over 10,000 trees and shrubs, representing over 4,000 different taxa (University of Washington, 2011).



## **Instrument**

The instrument (survey and interview protocol) used was based on a preliminary study performed at the Arboretum in May of 2010. The instrument was designed using guidelines from a number of sources (Diamond, Luke, & Uttal, 2009) (Nichols, 1990). After a series of pilot tests, the instrument was finalized. See Appendix A for a copy of the instrument. The first page was performed as a face-to-face interview. The back page was then handed to the subject so they could fill out the demographic survey portion. This was done to minimize any discomfort felt due to identifying one's race or age. During the face-to-face interview, the questions were free response. That means that the subject could say anything in answer to the question. While these types of responses can be difficult to analyze, I used them because they delivered a wide range of responses that cannot be obtained through multiple-choice questions. The demographic portion was closed-response.

### **Interview Questions:**

1. Why did you choose to come to the Arboretum today?
2. Where else might you have gone for a similar experience?
3. In your opinion, what are the most common reasons other people come to the Arboretum?
4. Do you have any suggestions for how the Arboretum could improve your experiences here?
5. How did you first learn about the Arboretum? OR Can you think of anywhere you have seen or heard information about the Arboretum recently?
6. How would you describe the Arboretum to someone who has never been here before?

**Figure 1: Interview questions used in visitor study**

The interview portion included questions that were meant to get why the subject came to the Arboretum and what do they do there? How does the subject think about the Arboretum? See the list of interview questions in Figure 1 above.

Two questions on the front page, “Why did you choose to come to the Arboretum today?” and “In your opinion, what are the most common reasons other people come to the Arboretum?” were meant to elicit responses about how the subject feels the Arboretum is used by visitors, including themselves. The second of the two allowed the respondent to step outside him or herself and look at what purpose the Arboretum serves, more broadly. People often answer differently when talking about “other people” than they do when talking about themselves.

The final question of the interview was “how would you describe the Arboretum to someone who has never been here before?” This question was asked to understand how Arboretum visitors think of the Arboretum. Many respondents answered with a short statement, such as “a large park with many different trees that you can walk through.” Others talked for several minutes about what the place means to them, or what they do there. This question, as well as the question, “where else might you have gone for a similar experience?” gave insight into how the subject views the Arboretum.

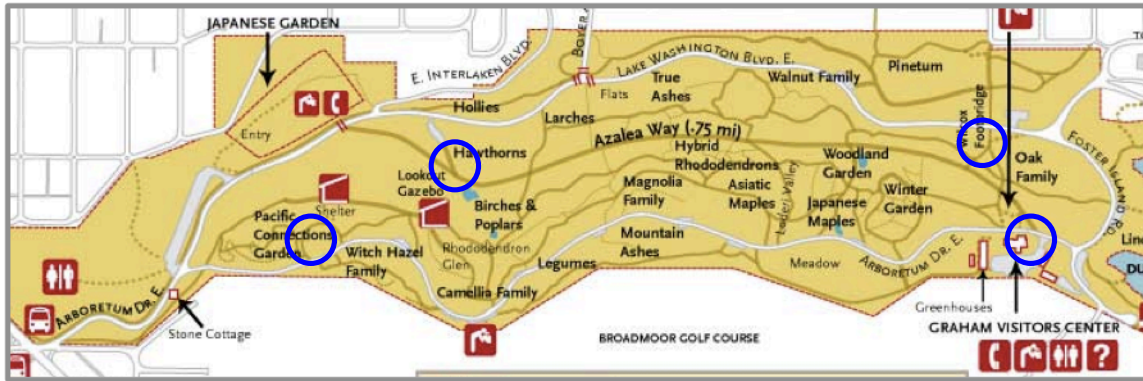
The back page, which was handed to the subject to complete, looked at demographics. Changes were made from the original spring pilot study to include zip code, as well as tour and website use. There are several reasons to find out where visitors live. First, if they are locals, they may be more likely to be regular users of the Arboretum. Second, knowing if people come from around the area,

from out of town, etc, can tell the Arboretum staff whether they have a reputation as a local attraction, and can help them target their marketing.

The last two questions ask the subject to rate their interest in plants and in gardening. These data were used to see if those who visit have a real interest in plants and gardening.

### **Data Collection**

This study took place over four months in two seasons: October and November 2010, and January and February 2011. Interviews were conducted at four locations: Graham Visitor Center, the Wilcox Footbridge, the Pacific Connections Garden, and the parking lot near the Hawthorn collection (See Figure 2 below.) These locations were chosen because they cover four main entry points to the Arboretum. Rather than seek a set number of respondents, I chose to be at the Arboretum for a set amount of time. The number of respondents each month may help to indicate the visitorship at the Arboretum by season, day of the week, or time of day. Each month, three hours of data were collected at each location (two hours during the week, one on the weekend,) for a total of 12 hours per month. Collecting times were evenly divided between morning (9am – 1pm) and evening (1pm – 5pm).



**Figure 2: Map of the Washington Park Arboretum, excluding areas not used in survey. Blue circles show locations of data collection.**

In addition, I attempted to be at the Arboretum to interview people during a few special events or holidays that generally draw a large crowd. The goal of this was to talk to an audience that was perhaps less “typical” of the regular visitors. However, there was only one such occasion during the collecting months: the Gateway to Chile opening celebration on October 17, 2010. One hour of data was collected during this event, and was included in the October data (which is why October has 13 hours of data collection.) All other months have 12 hours of data collection.

When choosing subjects, I envisioned an imaginary line where two paths intersect. All of the locations had multiple lines, depending on the number of paths coming together at that point. I encountered people coming from either direction, so some subjects had just arrived at the Arboretum, others were leaving, and others were partway through their visit. As soon as I was prepared to interview someone, I intercepted the first person to cross this imaginary line. If a group crossed together, I chose the person closest to me on the path. For more details on the interview process, see the script in Appendix B.

In addition, I recorded the number of people who declined to participate in the survey (“refusals”). I also made note of how many bikers or joggers passed by that I would otherwise have attempted to interview. I chose to not interview exercisers before collecting any data for several reasons. First, I did not know how to politely approach people who were passing so quickly. Second, I believed that there would be a high rate of refusal, due to the fact that people exercising often want to maintain a high heart rate. Therefore, I smiled and said “hi” to them and let them pass unobstructed. I recorded how many of these people I saw, and have included these numbers in my results.

## **Data Analysis**

After all data were collected, answers to each free-response question were analyzed to determine the range of possible responses. These responses were then divided into categories, as few as possible that would still tell a complete story. Two questions - why the visitor came and why they believe others come - used the same codes. The rest, where else the visitor might have gone, how they knew about the Arboretum, what suggestions they had, and how they would describe the Arboretum, were all coded separately. See Appendix C for a list of all possible responses and codes.

Once all these data were sorted, they were entered into SPSS, statistical analysis software. For ease of analysis, each possible response was given its own column. Therefore, rather than having codes (1, 2, 3...) for different reasons why people came, each reason was its own column. Thus, there were many variables

(columns) and each was answered with a “yes” or a “no.” Demographic data was also coded and entered.

SPSS was then used to count the frequencies of each response. All variables’ frequencies were counted and added to a Word document for quick access. Many questions allowed for multiple responses (the free-response questions). Therefore, these do not necessarily add up to 249. The questions that allowed for only one response can be reported in percentages (such as age, sex, or zip code) but all free-response questions are reported in number of respondents.

In addition to frequencies of response, some variables were tested to see if there was a correlation between them. The data were analyzed using the “Crosstabs” function in SPSS, performing a  $\chi^2$  (chi-square) statistical analysis. Any relationships that had a likelihood of correlation more than 5% ( $p=0.05$ ) were considered significant.

## Results

### Overall Participation

- 249 visitors participated in the survey, over four months (October, November, January, and February).
- Visitors who refused to take the survey, as well as those jogging and on bikes (exercisers), were also tallied. Except in October, refusals combined with joggers and bikers equaled more people than those that participated in the survey. All total, there were 247 exercisers and refusals (see Figure 3).

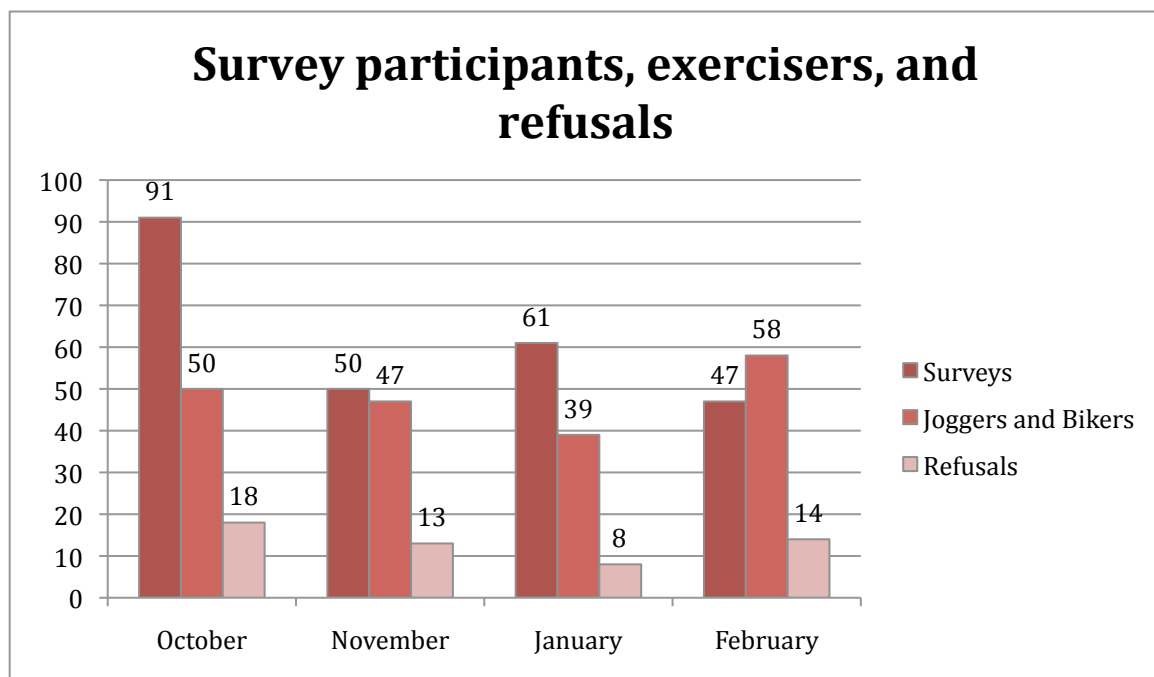


Figure 3: Total numbers of survey respondents, refusals, and exercisers in study, by month.

## Visitor Demographics

- 57% of respondents were female, 43% were male.
- Age of respondents was fairly evenly distributed, as seen in Figure 4. The largest single age group represented was 20-29 year-olds (23%). (Note: I only surveyed visitors if they were over 18.)

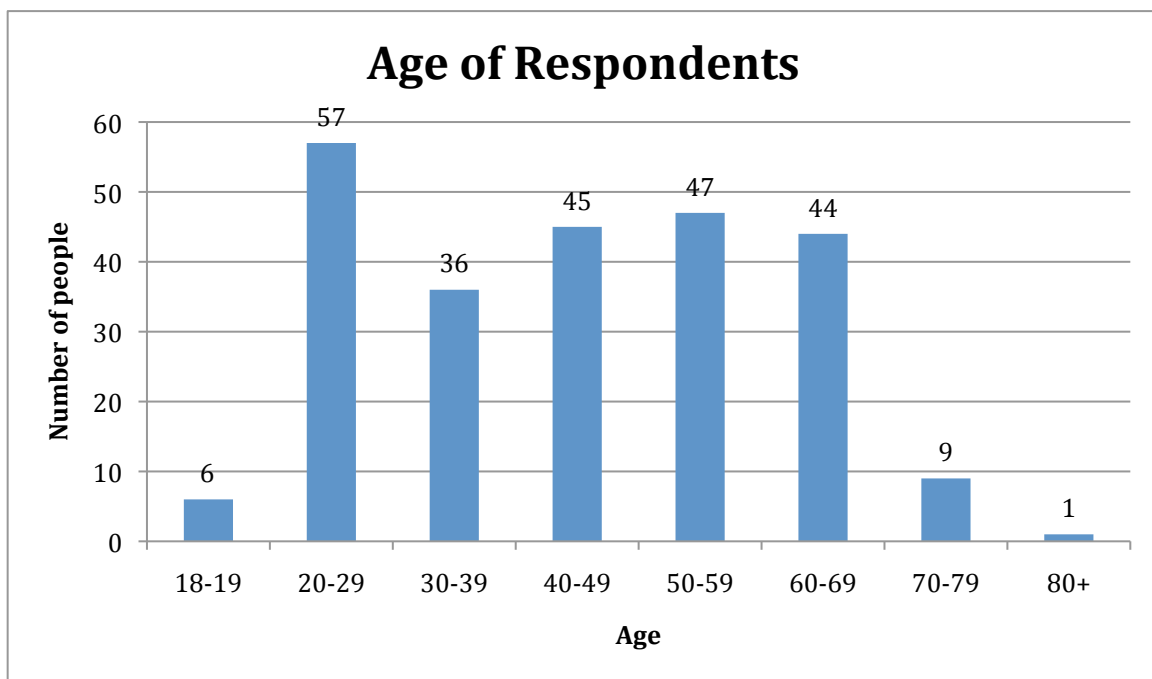


Figure 4: Visitor age distribution

- Race: The most frequent race was white only, with 202 people (82% of respondents). 17 people checked multiple races (7.2% of respondents). 2010 US Census Bureau Data states that in King County, 5% of residents identify as multi-racial. 69% of King County residents are white only (U.S. Census Bureau, 2011). (2010 Census data was not yet available for the City of Seattle



at the time of this study.) See Table 2 below for visitor races. Multiple responses were possible; therefore totals do not equal the number of respondents (n=245).

**Table 2: Visitor race or ethnicity**

| <b>Race or Ethnicity</b>            | <b>Number of respondents who identify with each race or ethnicity</b> |
|-------------------------------------|---|
| White                               | 220   |
| Black/African American              | 3   |
| Hispanic, Latino, or Spanish origin | 9   |
| American Indian or Alaska Native    | 3   |
| Asian or Pacific Islander           | 25  |
| Other race or ethnicity             | 5   |
| Multiple races                      | 17  |
|                                     |   |

- More than half of the respondents (53%) live in four zip codes near the Arboretum (98112, 98122, 98115, and 98102). 30% of respondents live in the same zip code as the Arboretum (98112).
- 31% of respondents had visited the Arboretum’s website (the survey did not differentiate between several possible websites for the Arboretum.)
- 94% of respondents have never taken a tour or class at the Arboretum.
- Participants were asked to rate interest in plants and gardening on a scale of 1-7 (7 being highest). The average ratings were 5.1 for interest in plants, and 4.7 for interest in gardening.

## **Group Makeup**

- Almost half of all visitors were in a group of 2 people (46%).
- 37% of respondents were visiting alone.
- 14% of groups included a child and/or a teenager.
- 23% of those surveyed were walking their dog at the Arboretum.

## **Visitor Use of the Arboretum**

- 85% of respondents have visited the Arboretum before.
- Of those who have visited before, more than a quarter (28%) visited 1-3 times in the previous 12 months. 22% were frequent visitors, those that visit once a week or more.
- When asked where they would go for a similar experience, a majority (161 people, or 65%) stated they would go to another city park. City parks most commonly mentioned were Discovery and Seward, both large parks with mature forests.
- Visitors learned about the Arboretum through general knowledge (52 people), word of mouth (49 people), communications from the Arboretum, such as advertising or emails (46 people), and from the news (44 people).
- When asked what they would change to improve their experiences, respondents frequently suggested physical changes (91 people) and informational changes (60 people) to the Arboretum.
- Of physical changes suggested, changes affecting visitor comfort (benches, drinking fountains, trash cans, and restrooms) were suggested by 30 visitors.

61 visitors suggested changes to the Arboretum structure (trails, plantings, maintenance, handicap access, or other facilities).

- The single most suggested change was an improvement in wayfinding, suggested by 39 people. The second most common suggestion (by 24 people) was to fix the muddy trails (Azalea Way and the Marsh Island Trail). There was a correlation between visitors who had never been to the Arboretum before and those that requested improvements in wayfinding ( $\chi^2 = 5.848, p = 0.016$ ). Frequent visitors rarely suggest improvements in wayfinding.

## Visitor Motivations and Perceptions

- The most common reasons people gave for why they visit the Arboretum were general enjoyment (166 people), the use of the Arboretum as a backdrop or setting for an activity, such as jogging (113 people), or for the plants and landscape (98 people). See Figure 5 for all responses.

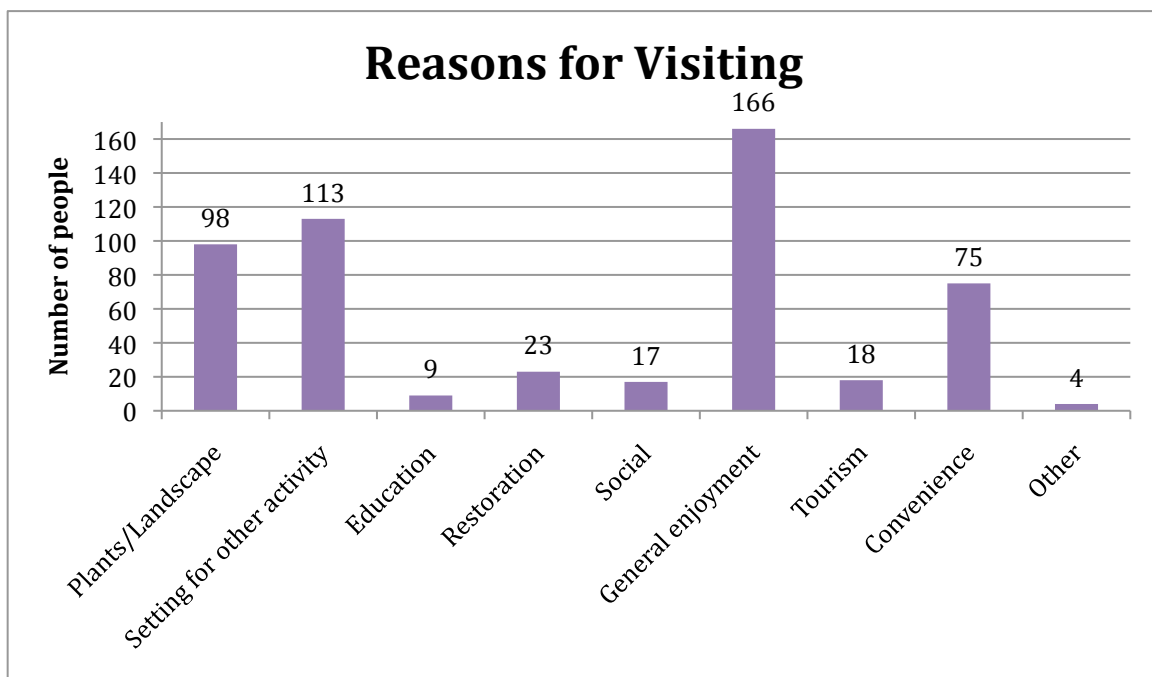
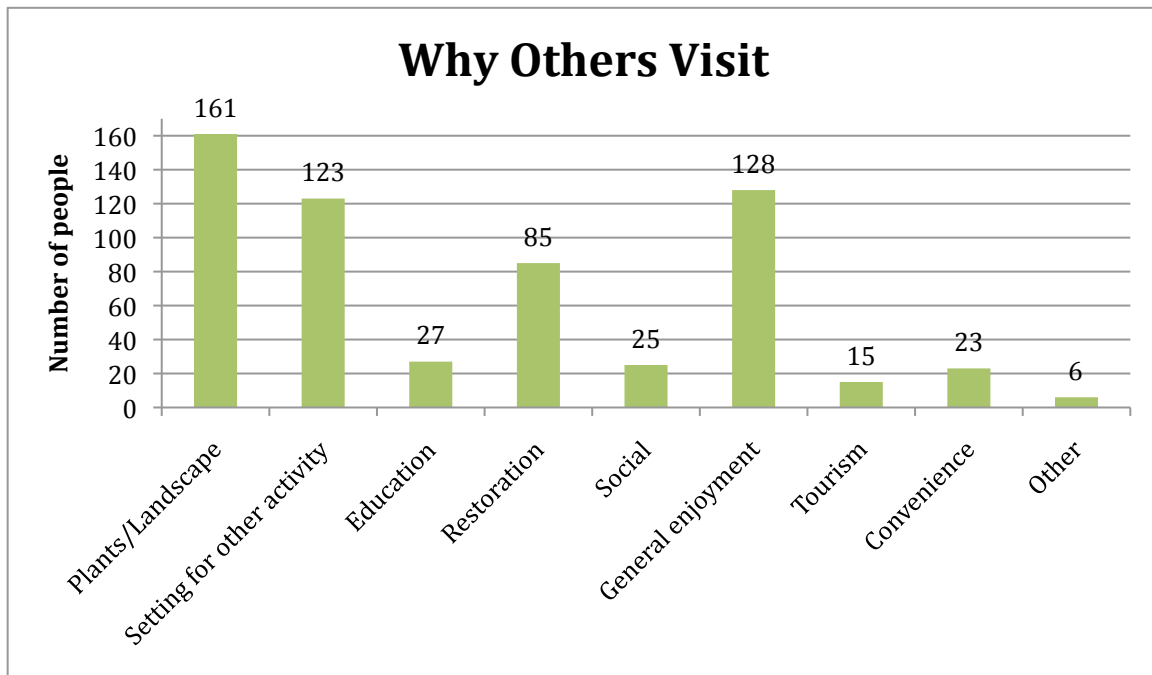


Figure 5: Why visitors say they came to the Arboretum.

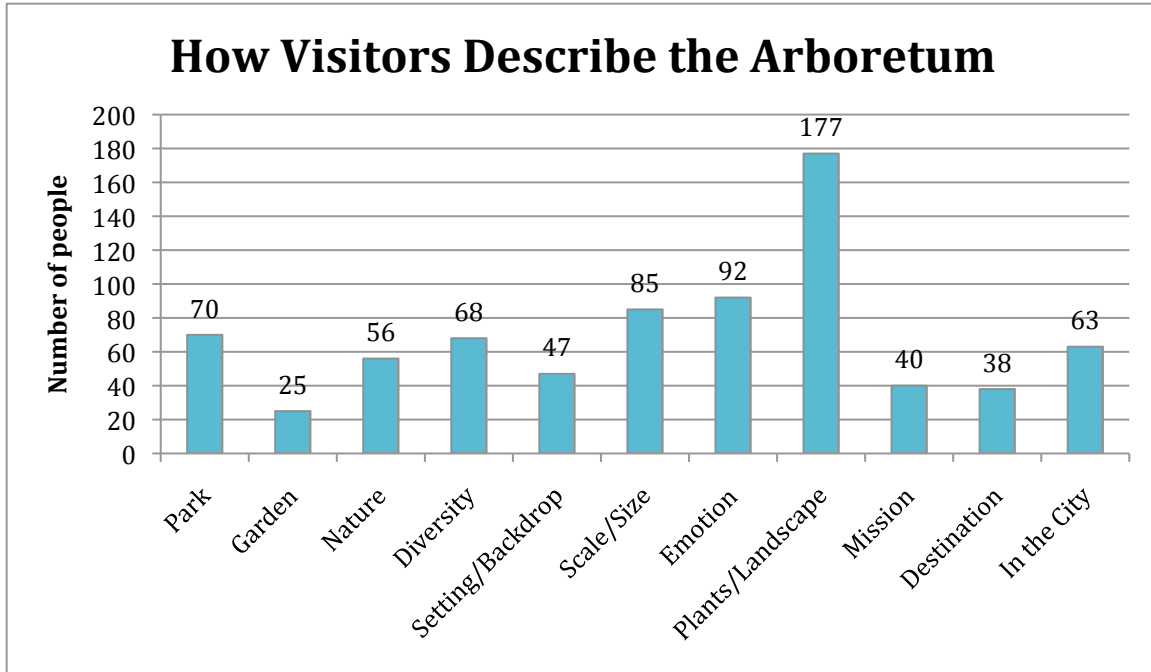
- People said they think others come for similar reasons, but in different ratios. Most believe others come for the plants and landscape (161 people), followed by general enjoyment (128 people), and as a setting for an activity (123 people).

- Education, restoration, and plants and landscape were mentioned more often in response to why *other* people come to the Arboretum than they were for why the visitor came himself or herself. Convenience was mentioned less often.



**Figure 6: Why visitors say other people come to the Arboretum.**

- Visitors who came because of the plants were more likely to say they'd go to another arboretum or to a natural area if they hadn't come to the WPA ( $\chi^2 = 13.204, p = 0.000$ , and  $\chi^2 = 5.397, p = 0.02$ , respectively).
- Visitors who come for the plants are *less* likely to say they would go to city streets or neighborhoods if they didn't come to the Arboretum ( $\chi^2 = 5.135, p = 0.023$ ).



**Figure 7: How visitors describe the Arboretum.**

- When asked to describe the Arboretum, 177 people mentioned plants or the landscape setting (71% of all respondents).
- The four most frequent terms used when describing the Arboretum were those relating to plants (177 people), emotions (92 people), the size or scale of the Arboretum (85 people), and that the Arboretum is a park (70 people).

## Local visitors

People who live in the zip code 98112, the same as the Arboretum, are considered “locals.” 30% of visitors were from this zip code.

- Locals were more likely to bring a dog ( $\chi^2 = 12.583, p = 0.0$ ) than other visitors.
- Locals were more likely to list convenience ( $\chi^2 = 67.719, p = 0.0$ ) as a major reason for coming, and less likely to list plants or landscape ( $\chi^2 = 13.331, p = 0.0$ ) than those that live outside this zip code.
- Locals were more likely to describe the Arboretum as restorative ( $\chi^2 = 11.255, p = 0.001$ ) than other visitors.
- Locals were more likely to suggest changes in the rules than other visitors ( $\chi^2 = 5.2, p = 0.023$ ).
- Locals were more likely to be frequent visitors than non-locals ( $\chi^2 = 37.464, p = 0.0$ ). Frequent visitors are those that come weekly or more.
- Visitors from four nearby zip codes (98112, 98122, 98115, and 98102) were much more likely to visit alone than other visitors ( $\chi^2 = 22.666, p = 0.004$ ).

## Solo Visitors

This study shows that the Washington Park Arboretum is unique in how many people visit alone. Other studies at gardens have shown that from 1-25% of visitors were alone. At this arboretum, 37% of visitors were alone.

- Solo visitors mentioned convenience or setting for an activity more than visitors in groups.
- Solo visitors were much less likely to come because of the plants, and fewer of them mentioned plants when describing the Arboretum.

## **Young Visitors**

Visitors aged 20 – 29 were the largest represented age group of visitors in this study. This is uncommon amongst gardens and other sites of informal learning. To understand why these numbers are high, I looked more closely at the motivations and behaviors of young people. For this portion, “young visitors” are those aged 18 – 29. There were 63 respondents in this group.

- Young visitors were slightly less likely to be local than older visitors. 21% of young visitors lived in the Arboretum’s zip code (98112), while 33% of visitors 30 and older did. This may in part be because this zip code is generally upper-middle class, and has mostly single-family homes. 46% of young people lived in the four local zip codes most represented at the arboretum, while 56% of people over 30 did. These zip codes are probably more age-diverse.
- Young visitors came in groups of two more often than any other size.
- No young visitors had taken a tour or class at the Arboretum.
- Only 3 young visitors surveyed were in a mixed-generation group. Mixed-generation groups were those with people from two or more of these groups: children, teenagers (13 - 19), adults (20 – 64), and seniors (64+).



- More than 2/3 of young visitors had visited before (43 people), but only 4 were frequent visitors (once a week or more).
- The ratio of young visitors to other visitors is 1:3 in all months except February, where the ratio is 1:2.

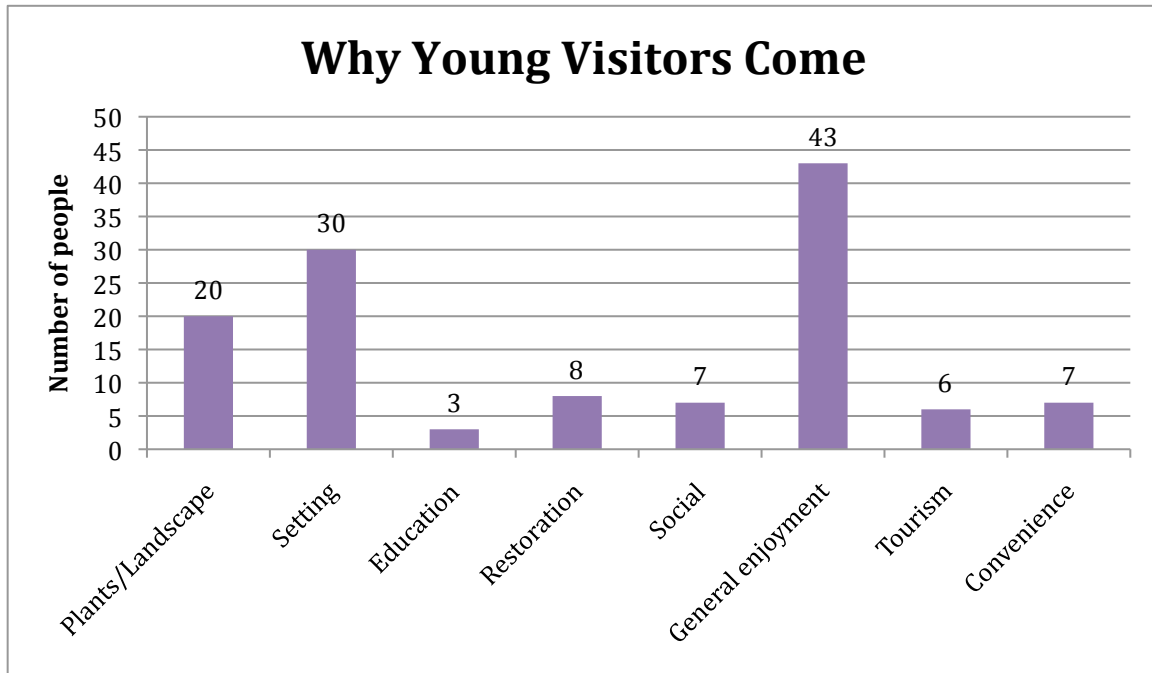


Figure 8: Why young visitors come to the Arboretum.

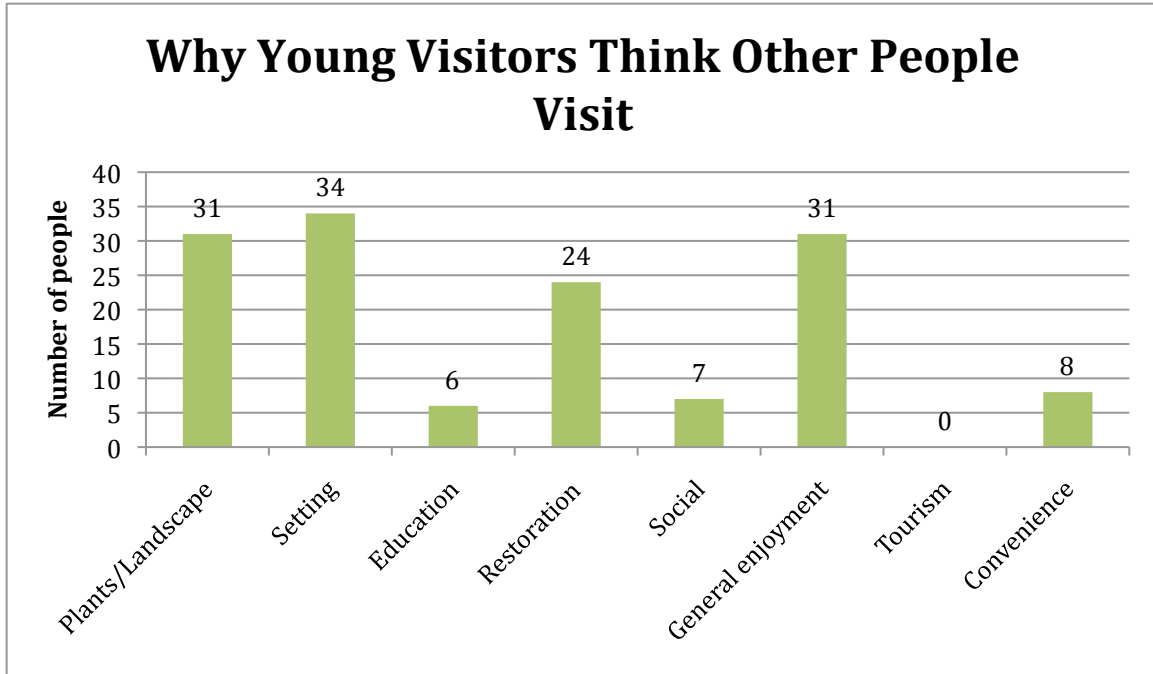


Figure 9: Why young visitors think other people come to the Arboretum.

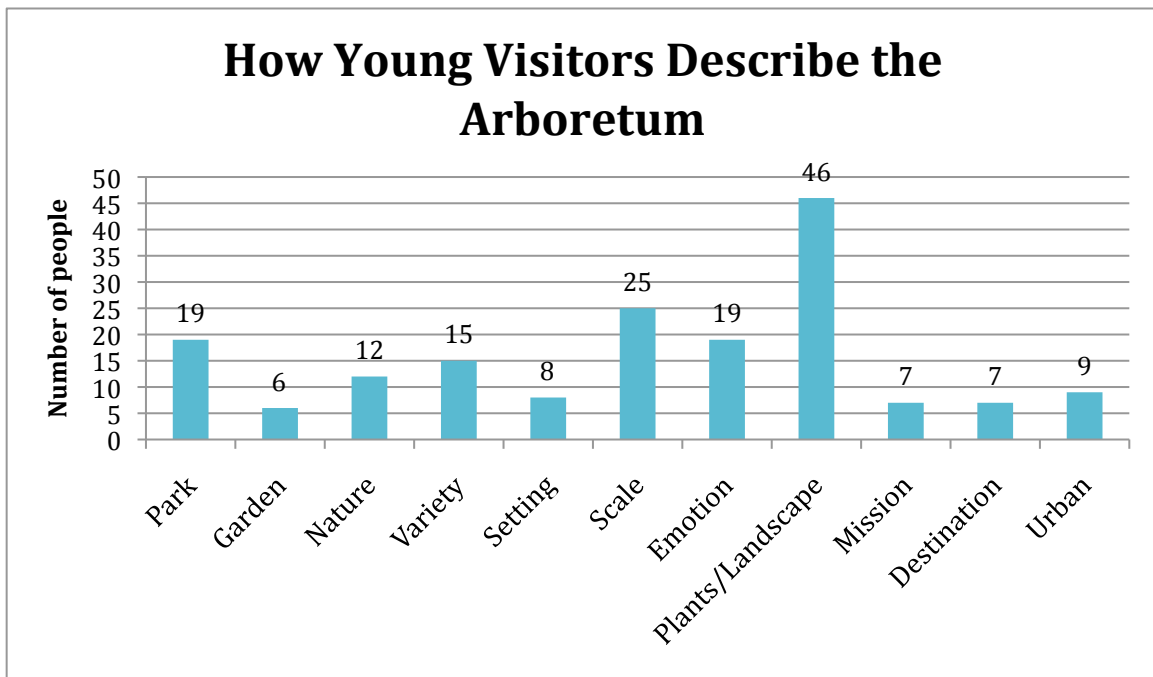


Figure 10: How young visitors describe the Arboretum.

These three charts (Figures 8-10) echo the shape and proportion of the charts for these same questions in the entire sample (Figures 5-7). The only exceptions seem to be that convenience increased between Self and Other, albeit only slightly, whereas in the general sample it decreased dramatically. None of these data show major differences between young and older visitors, and therefore do not provide much insight into why young visitors are the largest age group in the sample.

It may be simply that more young people appear in the fall and winter samples because they are more likely to brave the weather. More research into this is warranted to understand why the audience is so young.

## Discussion

This study looked at fall and winter visitors to the Washington Park Arboretum. The results demonstrate that visitors are aware of the Arboretum's role as a destination park with a wide variety of plants in the city of Seattle. The results also show that visitors are less aware, or make less use of, the educational resources the Arboretum offers.

Some of the constituency groups identified by this study are local visitors, frequent visitors, young visitors, and solo visitors. Each of these groups was well represented in the fall and winter at the Arboretum. The data appear to show a connection between frequent users, local users, and type of use. Locals are a core constituency of the Arboretum. They are likely to use the park often. They tend to use the space as a neighborhood park, using it to walk their dogs, relax from work, and exercise. They are also more keenly aware of rules and policies, because they suggest changes to them ("allow dogs off-leash," "more jogging trails," etc). This signifies that the local users are, as one might expect, familiar with the rules at the Arboretum. The difference between local, frequent users and infrequent users demonstrates an interesting dichotomy that the Arboretum epitomizes in every aspect of its existence: the duality of being a park and an arboretum.

People who have never been to the Arboretum before are most likely to request better wayfinding, whether it be directional signs, maps, or brochures of what to see. Orientation as a visitor arrives, particularly for the first time, helps them feel welcomed by the organization. It is important for people to feel that they

understand their surroundings before they can explore or enjoy them (Falk & Dierking, 1992) (Kaplan, Kaplan, & Ryan, 1998). Of people who have never been to the Arboretum before (38 total), 29% requested better wayfinding. Of people who have been before (247 total), only 16% requested better wayfinding. And only 5% of frequent visitors (2 out of 44 total) requested better wayfinding.

Winter and fall visitors are the only subjects of this study. However, it seems appropriate to say that these visitors represent a “core” audience for the Arboretum. Falk and Dierking (1992) see this trend in other museum institutions as well: winter visitors are more likely to live locally and come regularly, whereas summer visitors are more likely to be infrequent museum goers and/or from out of town. The Arboretum’s core audience includes more than just locals, it also includes people looking to be amongst plants and those looking for a peaceful setting. Spring and summer are likely to attract different people with different motivations, in addition to this core group.

By looking at how people describe the Arboretum, along with what they say they come for and where else they say they might go for a similar experience, a story can be told about how visitors perceive the Arboretum. They see it as a large park-like space that is filled with many different trees and shrubs from around the world. They see it as a place for peaceful enjoyment of the outdoors. They see it as an important piece of undeveloped land in Seattle. In general, people visit the Arboretum for an outdoor experience, whether it is active, restorative, social, or informational. They come for plants, they come to relax and get away.

## **Summary**

The Washington Park Arboretum is a large organization, both in size and in structure. All levels of the Arboretum can benefit from a deeper understanding of their visitors. In order to serve the audience most effectively, audience research provides a tool for understanding visitors' motivations and perceptions. This study demonstrates that the Arboretum is serving a wide range of people with a variety of expectations. Surveys such as this one can provide the Arboretum with the tools it needs to focus their offerings towards their current audience, or towards new audiences.

## Limitations

- Because these data were only collected in fall and winter, it is possible that visitors in spring and summer are significantly different in their uses and perceptions of the Arboretum.
- Data for special occasions was only collected during one event. More events might have brought new voices to the survey.
- Inductive coding is subjective in nature.
- There is a possibility of bias in the ordering or wording of questions. For instance, the final question, “How would you describe *the Arboretum...*” contains the word “arboretum.” This may make the respondent more, or less, likely to include the word “arboretum” in their response.
- The free response nature of questions allows for vague responses. The respondent may forget or just not mention a key part of their visit. They may be reacting to a question rather than really thinking about the answer.

## Implications for Further Research

- The Arboretum may wish to repeat this study during spring and summer months.
- Future iterations of this study might be more easily implemented with surveys with closed-response questions that contain checklists based on this study’s findings. (For instance, a question might read: “Which of these describes why you came to the Arboretum today: 1. Plants and landscape, 2.

Exercise, 3. Art or photography, 4. Curiosity or learning, 5. Relaxation, 6. Socializing with friends or family, 7. Tourist attraction, 8. Spending time outdoors, 9. Bird or animal watching.”) Closed-response questions are easier to analyze, and seeing a list of options may help remind visitors of the possible reasons they came.

- Further research might look more closely at passive enjoyment, and what that really “means” to the visitors.
- Further research might seek out those who come to the Arboretum to learn and look at the ways they learn while at the Arboretum.
- Further research would be useful in looking at younger visitors, to understand why they come and what they do at the Arboretum.
- Tracking visitors, or other forms of observations, might reveal insights into how visitors use the Arboretum that they do not mention to the interviewer. For instance, several subjects were seen carrying leaves they had collected at the Arboretum, but then did not mention leaf collecting as something they were doing.



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# Appendices

## Appendix A: Interview and Survey Instrument

Survey # \_\_\_\_\_  
Initials \_\_\_\_\_

Arboretum Visitor Study  
Location \_\_\_\_\_

Date \_\_\_\_\_ M-F S-S  
Time Block \_\_\_\_\_

---

Why did you choose to come to the arboretum today?

Where else might you have gone for a similar experience?

In your opinion, what are the most common reasons other people come to the arboretum?

Do you have any suggestions for how the arboretum could improve your experiences here?

How did you first learn about the arboretum? / Can you think of anywhere you have seen or heard information about the arboretum recently?

How would you describe the arboretum to someone who has never been here before?



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Other notes:





## Appendix B: Script and Protocol

What you need:

- Clipboard
- Blank instruments
- Blank paper for tallying refusals, etc
- Something to store extra blank instruments, and completed instruments. I used a plastic file folder that was able to keep the contents dry in light rain.
- Pen and pencil
- Badge identifying you as Arboretum personnel
- Map of the Arboretum (for yourself and to assist visitors)
- Umbrella
- Plastic for covering clipboard in the rain
- Comfortable shoes and clean, weather appropriate clothing

During the interview portion, you will need to take notes quickly but legibly. I prefer using pencil in the rain and pen at other times.

Once you are in place and ready, assign an invisible line to a spot on the walkway. (You may need multiple “lines” depending on how many pathways meet at your location.) Approach the first person to cross the line that appears to be over 18 years old. If a group crosses at once, chose the person closest to you. As you approach, smile and say,

“Hi! My name is Cynthia and I’m talking with Arboretum visitors so that we can get to know our audience better. Would you be willing to answer a few questions about your experiences here?”

*<If asked “how long does it take,” the survey takes about 5 minutes to complete>*

*<If “no:” say, “Thank you so much, have a great day!”>*

*<If yes>*

“Wonderful, thank you!”

“Why did you choose to come to the Arboretum today?”

*<If they answer vaguely, like “it’s a nice day,” follow up by asking “and what do you plan to do here today?” or “what have you been doing here?”>*

“Where else might you have gone for a similar experience?”

“In your opinion, what are the most common reasons other people come to the Arboretum?”

*<If they say they have no idea, say, “there are no right or wrong answers, I’m just wondering what you think people come here for”>*

“Do you have any suggestions for how the Arboretum could improve your experiences here?”

*<On the next question, ask either/or portion. Base this on the previous conversation; for instance, if they've said “I just moved to the area” or “I come every day” you can tailor the question to the individual. If there are no cues, start with the first part of the questions and move to the second if they do not recall>*

“How did you first learn about the Arboretum?” OR “Can you think of anywhere you've seen or heard information about the Arboretum recently?”

“And how would you describe the Arboretum to someone who has never been here before?”

*<If they do not have an answer, for instance if they are just entering for the first time, you can ask, “do you have any first impressions about what this space is?”>*

Circle the weather symbol that represents the predominant weather, and the dog symbol if they are with a dog.

Note any side comments or conversations in the “Other Notes” section.

TURN THE SHEET OVER. As you do this, say,

“I have some demographic questions. Would you be willing to fill this out?” while showing them the short survey.

If yes, hand the clipboard, pen, and survey to the subject.

While they are writing, do not engage them in conversation unless they have a question. Do not look over their shoulder. It is fine to talk with other people in the party, but keep the conversation light and not distracting to the subject.

When they hand it back, say,

“Thank you so much. Your opinions will be very helpful to the Arboretum. Have a great day!”

Make sure all portions of the back are filled out correctly (in particular the “party size” question.) Write “N/R” or “N/A” next to any that were not answered. Make sure the survey is dated, initialed, and all necessary information is included about weather, location, date, time, etc. Put this sheet away.

Once you are finished putting the sheet away, wait for the next person to cross the invisible line and approach them.

Refusals, bikers, joggers, etc

Keep a sheet at the back of the stack on the clipboard with spaces for tallying refusals and exercisers. Make sure to date each portion, and keep separate spaces for tallying bikers and joggers for each location. Some people, for instance those on their cell phones, will not fit into any of these categories. Do not worry about tallying this type of activity.

Example:

12/12/2011 -

Refusals

Pacific Connections -      Footbridge -      GVC -      Hawthorns -

Bikers

Pacific Connections -      Footbridge -      GVC -      Hawthorns -

Joggers

Pacific Connections -      Footbridge -      GVC -      Hawthorns -



## Appendix C: Response categories and descriptions

Why did you come / Why do you think others come to the Arboretum?

Plants/Landscape - Beauty, trees, flowers, fall color, gardens, seasonal changes, nature

Setting or backdrop for some other activity - photography, jogging, dog, art, event (non-arboretum), birding, picnicking

Education - Discovery and Learning: informal (read signs, get ideas for plants, see what grows here) and formal (classes, tours)

General Enjoyment - get out, nice day, something to do, go for a walk, enjoy..., pleasant setting, had some free time

Restoration/Emotion - privacy, escape, relax, peace, "get away from the city," change of pace, be alone, time to think, oasis

Social - Friends, family, date, play with kids

Convenience - live near, free, plenty of parking, was in the area

Tourism - sightseeing, destination, bringing out of town guests

Where else might you go for a similar experience?

Arboretum - arboretum or botanic garden

Park - city park, walking trails, city green spaces

City - Streets, around a neighborhood, shops

Nature - natural area, state park, hiking

Tourist or Cultural - museums, libraries, zoos, cultural centers

None - nowhere else I would go

What suggestions do you have that would improve your experiences here?

None - no change, perfect as it is

Informational

Wayfinding - maps, directional signs

Plant labels or signs - nametags on plants, information about plants, landscapes, etc

Other - tours, iPhone app, way to hear about events, etc

Physical

Visitor Comfort

Seating - bench or picnic tables

Restrooms - improve or add more

Drinking fountains

More trash receptacles

Structural changes

Fix muddy trails - Azalea Way and Marsh Island Trail

Connect trails - make a clear "loop"

Plantings - native garden, more or fewer new designs

Handicap accessibility

Maintenance - weeding, pruning

Other facility - boat launch, café, playgrounds

Safety

Personal safety

Road safety - crosswalks, walking paths along road

Rules

Rules - more jogging trails, less jogging trails, dog off leash area, etc

Politics - 520 issues, funding

Convenience

Roadway – open or close Arboretum Drive or Lake Washington Blvd.

Transportation – better access via public transportation

Parking – more or better parking areas

How did you learn about the Arboretum or hear about it recently?

General – known about forever, driving through

News – news media, newspapers, radio

Internet Search – searching for activities, etc, in Seattle

Website – visiting the Arboretum’s website

Map – saw on a map

Communication – Arboretum messaging, banners, emails, flyers, Facebook

Word of Mouth – friends, coworkers, family

Other – travel literature, from an organization

How would you describe the Arboretum?

Park – city park

Garden – botanic garden, arboretum

Nature – natural, woods, forest, wilderness

Variety – Diversity, variety, unique, rare plants, plants from all over the world

Setting - for an activity, jog, watch birds, picnic, etc

Scale or size – large, vast, ability to explore, get lost

Emotion

Safety – free from danger

Restoration – feelings of rest, relaxation, wellbeing, escape, peace, oasis,  
hidden, secret

Personal feeling – a favorite place,

Plants/Landscape – Plants, collection, landscapes, individual gardens, beauty,  
seasons

Mission – education, connection to UW, preservation, conservation, Olmsted

Destination – tourism, importance to Seattle

Urban – in the city, near downtown