Visitor Interpretive Experience Plan



for Bowman's Hill Wildflower Preserve

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Acknowledgments

The team

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Executive Summary

Introduction

The Visitor Interpretive Experience Plan for Bowman's Hill Wildflower Preserve identifies the interpretive opportunities and supporting infrastructure that need to be developed and other aspects of the visitor experience that need to be addressed to create attractive visitor experiences while maintaining the most important purpose of the Preserve, which is to protect / conserve / restore native flora in the Preserve and the Delaware Valley.

Direction

Interpretive opportunities are tools to help attain the overall goals of the Preserve, so it was from the Mission Statements, Values and Positioning that Interpretive Program Goals were derived. All can be found in Appendix A. Of particular note was the following Positioning Statements from the Strategic Plan (2016-2021): In 20 years, BWHP will be:

- The best, and most credible place in the Mid-Atlantic to see and learn about native plants
 growing in natural habitats and communities. The credibility stems in large part from a sciencedriven approach. As a consequence of the range of credible information and opportunities onsite, BHWP is a highly desirable destination for people from throughout the region and beyond,
 to the extent that not all can be accommodated without damaging the resource and/or
 interfering with other functions of the site.
- 2. The 'go-to' place in the Mid-Atlantic that offers a comprehensive variety of programs about the identification, conservation of, gardening and landscape use and ecological importance of native plants. Part of the reason for the high status is that it focuses on low-maintenance, natural ecosystems, not high-input gardens. As a consequence, people from all around the Mid-Atlantic use information from the site on a regular basis, whether remotely or as a visitor.
- 3. A model operation for others to emulate for a native plant preserve, and for how people can develop native plant communities, whether within their own yard or in public areas in their communities. As a consequence, similar organizations use BHWP as a model in developing their properties.
- 4. A sanctuary for a diverse range of native plant species of the Delaware Valley, including some that are rare, threatened, or endangered. This is consistent with the desire to create a sense of place, specifically, a sense of the Northern Piedmont in Bucks County (from BHWP Plant Collections 2018-2020 under Part VI Looking Forward).
- 5. As a consequence of work and opportunities by BHWP, the number of people in the Mid-Atlantic area who highlight native plants in their yards is significantly higher. (This is one possible manifestation of the goal of 'changing the world.')
- 6. As a consequence of actions by the Preserve the site enjoys a sustainable level of visitation from a broad cross-section of people.
- 7. The membership in the Preserve is significantly higher.
- 8. BHWP enjoys a steady stream of first time and repeat visitors throughout the year because it offers high quality experiences for everyone all year, including an outstanding array of interpretive and educational opportunities.

Interpretive Goals were derived by identifying how an Interpretive Program can help make significant progress towards achieving the Vision as described in the Positioning Statements. Based on using that

approach, the primary interpretive goal identified is to motivate visitors to become active stewards of the natural resources and supporters of Bowman's Hill Wildflower Preserve. Specific interpretive goals include the following:

Interpretive Program Goal 1: Motivate people from all over the Delaware Valley to use BHWP to obtain cutting edge information on using native plants in landscaping, both by getting information on site and by using resources available remotely, such as information on the web.

Interpretive Goal 2: Inspire visitors to help protect, rehabilitate and restore the natural world in which they live and work by planting native plants, inspiring others within their communities to do the same, and providing support for their efforts through expert knowledge.

Interpretive Goal 3: Motivate visitors to want to learn more about the key topics presented in the interpretive opportunities.

Interpretive Goal 4: Increased awareness of, appreciation for, and support for the work of the Preserve in restoring and conserving the natural resources on-site.

Interpretive Goal 5: Significantly increase the use of interpretive opportunities by visitors to the Preserve, especially by target audiences within Pennsylvania, and people living in the Delaware Valley – both on the Pennsylvania and New Jersey sides of the river.

Interpretive Goal 6: Increase the percentage of visitors who visit similar complementary sites in the mid-Atlantic area.

Key Target Audiences

Achieving those goals involves reaching the following key target audiences, all located within the Delaware Valley:

- 1. Gardeners and homeowners
- 2. Families with children
- 3. Birders and nature enthusiasts
- 4. Health and wellness enthusiasts
- 5. Group tours (25 max) (most likely groups like Master Gardeners or birders on a tour)
- 6. Landscape professionals
- 7. Non-traditional/ first time

Complete profiles of these target audiences can be found in Appendix B.

Key Factors

Achieving these goals involves working within the context imposed by myriad factors emanating from the social and physical environment in which the interpretive network must function. Key factors in developing the plan include the following Parameters and Opportunities. A complete list of factors in those categories can be found in Appendices C and D respectively:

B-1: Budget is not likely to be sufficient to implement everything recommended in the plan at the same time. The plan needs to be structured so it can be implemented using a phased approach. In addition, the first experiences developed should be highly visible with a high probability of quick return on investment to maintain momentum.

- **B-2:** Plant sales are an important source of income, and the nursery that supplies those plants and plants for the site is an important part of the operation. The interpretive program must not interfere with this function, and should, if possible, enrich the experience of buying a plant by providing interpretive opportunities.
- **B-5:** The Pond is popular for weddings, another source of income. The Pond should contain optional interpretive opportunities to avoid significant negative impact on the interpretive experience when the area is being used for weddings.
- B-6: It is possible that weddings are taking resources away from basic needs, such as maintaining trails.
- S-1: BHWP has a limited number of staff and volunteers trained to provide interpretive services.
- **S-2:** BHWP relies on volunteers to give programs, lead tours, and provide other services that involve interfacing with the public. Training programs that include interpersonal skills should be offered on a regular basis. These could be used as a method for potential volunteers to 'get their feet wet,' in which case they should be offered for free (eliminate cost as a barrier).
- PI-1: The Preserve includes multiple trails and a variety of routes a visitor can take to explore the site, contributing to current issues involving wayfinding. A good orientation and wayfinding system should be developed.
- PI-3: The Preserve has a Visitor Center, although it shares the space with a variety of other functions, reducing the effectiveness of the Visitor Center, the Gift Store and the Administrative Offices. Indoor interpretive opportunities can be (and already are) a part of the visitor experience, although they are somewhat limited due to lack of dedicated space and issues with access when the building is hosting events / programs.
- **PI -4:** The Preserve has built a pond, pumphouse, and pavilion with landscaping in the north part of the Preserve adjacent to the exit route. This built environment is popular for weddings, and is popular with visitors, although it requires a walk from the Visitor Center since it has very limited parking. Given the 'built' nature of the environment, and the fact that it is fully accessible, this site is better suited to be at the beginning of a visitor experience rather than at the end if the desire is to move visitors gradually from a built to a natural environment.
- **PI -5:** The site has a plant nursery in close proximity to the current Visitor Center building. This facilitates the plant sales, and creates the opportunity to attract people to the Visitor Center who are coming for the plants, and vice versa. It also creates a good interpretive opportunity. It is unlikely that this will be moved in the near future.
- PI -7: The Preserve already has a network of interconnected trails / pedestrian walkways (5+ miles) that access virtually all parts of the site. Additional visitor experiences can be developed without the need to build more trails, thus reducing the cost for implementation.

- PI -16: The site contains a limited number of washroom facilities (at the Visitor Center and Moore Pavilion). This could hamper exploration of BHWP because the existing facilities are located on the edge of the site rather than in strategic central locations.
- **PI -17: Designated parking areas in the Preserve (excluding the meadow) are limited.** This can be an issue during events and popular visiting times.
- **PI -19:** The Visitor Center cannot really be expanded to better accommodate the uses it now supports. Given the desire to have as much impact as possible, a new facility should be added some time in the future.
- **PL-9:** By policy, the Preserve will focus on plants found within the Northern Piedmont Ecoregion. Most of the Delaware River Valley is in this ecoregion, so for those from the valley, the Preserve offers an opportunity to see plants and plant communities that they could use for landscaping, and the opportunity to buy such plants. For those from outside the area, but within the mid-Atlantic region, the Preserve needs to have obvious information of value regarding how to plant and use plants native to those areas, but has to do so without using actual plants.
- **PL-14:** By policy, weddings are entitled to use of the Pond area, picnic pavilion, the restrooms in the meadow and the parking in the meadow. This limits the experience for people visiting at the same time as a wedding. This is especially an issue for families with children because the Pond area and meadow are the only places children can be more 'feral.'
- **EI-4:** The Preserve has developed bird viewing areas outside the windows in the primary space within the Visitor Center. This creates a good opportunity to focus on the story of the connection between birds and wildlife, and native plants. However, this space is not available when the room is being used for programs.
- S-1: The parking area for the Visitor Center does not have designated pedestrian walkways, resulting in people walking through the lot (and on the road) to reach the Visitor Center. The plan should address the desire to separate pedestrians and motorized vehicles to the extent possible.
- **S-2: Many of the routes to explore the Preserve require walking on active roadways.** The plan should address this issue.
- **RP-3:** The Preserve has to keep deer out in order to maintain its collection of native plants. This needs to be communicated, especially because the deer fence is highly visible in areas.
- **RP-4:** The Pond area and the trail between the Pond and the Visitor Center are overused. The interpretive network should be cautious about creating opportunities that would increase usage of this area and this trail.
- **RP-5:** The area has a carrying capacity in regards to people, although that number has not been determined. Unlimited visitation is not an option, so care must be taken to focus on priority audiences.
- **O-1:** All orientation and wayfinding information –both fixed and non-fixed are in English. If the Preserve wants to attract audiences that speak other languages it may need to develop basic orientation, wayfinding and interpretive information in other languages.

- **O-2: The Preserve holds plant sales everyday April November that are well attended.** This creates a great opportunity to provide associated interpretation.
- **O-5: The site has spotty cell phone coverage.** This limits the use of interpretive opportunities that involve the use of a cell phone, such as an App.
- O-10: The Preserve currently has issues collecting fees from visitors.
- **O-11:** Limited carrying capacity makes it difficult to create opportunities for school groups. In terms of on-site opportunities, this may not change because serving school groups is likely to require some significant additions to the infrastructure. However, this group could be reached with Outreach strategies.

O-12: It is important to avoid having interpretive opportunities detract from the character of the Preserve.

Messaging (Themes)

Motivating people to take action regarding resources requires that they value the resource (or BHWP) as a key part of what they consider quality of life; that they are aware that the resource (and therefore their quality of life) is threatened; and that an ongoing effort to conserve the resource exists and includes people similar to the visitor. If those conditions are met, a Call to Action is much more likely to be successful. The following key messages (themes) were selected with that in mind.

- Interpretive Theme 1: Native plants are important to your quality of life.
- Interpretive Theme 2: Plants, and all other biological organisms, depend on their specific habitats to flourish.
- **Interpretive Theme 3**: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.
- **Interpretive Theme 4**: Everything in an ecosystem is linked. Eliminating one element has a ripple effect throughout the ecosystem.

Sub-themes and supporting stories for each theme, which can be found in the section on themes, provide the fodder for the interpretive network.

Key Recommendations

Recommendations are organized by stage of the visitor experience – Choosing to Engage; Pre-Visit; Travel; Arrival; Primary; Departure; Return Travel; Post Trip. The most significant recommendations come in the Arrival and Primary stages of the Visitor Experience. Key recommendations, *not organized in any particular order*, include the following:

Parking Area modifications

Modify the parking area by delineating pedestrian walkways within and/or adjacent to the parking area that are protected from cars. This can be as simple as using planters to create protected walkways. Also

create small protected staging areas associated with the parking area that families and groups with children can use as waiting areas for their children while unloading or loading vehicles.

Visitor Center Directional Signpost

This directional signpost is located between the parking area and Visitor Center so visitors encounter it as they approach the building from the parking. The sign indicates the direction to the Tour Staging Area (to the left), the Visitor Center (ahead), the restrooms (ahead and slightly to the left), the plant sale area (to the right), and the trailheads to the Azalea and Parry Trails at a minimum. Ideally, this will cause visitors to focus to the left to find the restrooms, and will bring their attention to the Tour Staging Area so if they are coming for a tour, they know not to wait on the porch area, thus effectively blocking visual access to the restrooms. (Consider removing the bench on the front porch to further discourage people waiting for tours to start to wait in that area.)

Welcome Kiosk

This is a small sheltered structure in front of the Visitor Center to a visitor's right as they approach from the parking area. The kiosk can be staffed during periods of heavy use so visitors do not need to go inside the building to gather orientation, wayfinding and interpretive information, thus reducing congestion during those time periods. The information can also be offered when the kiosk is unstaffed.

Shaded Staging Area

Given that the area adjacent to the Visitor Center where the picnic table is located cannot be used as a staging area, the narrow space between the parking area and Visitor Center and the need to solve the issue of tour participants causing congestion by waiting on the sheltered porch area, the best location, by default, is directly across from the restrooms in what is now a small garden area (see image below). This area should have shaded /sheltered benches. The trail currently located in this area should be maintained as an opportunity for children to move around while waiting.

Site Orientation Panel

This is a map of the site depicting all features, distances between features and images of key destinations to entice people to seek out those places. They are located at the Visitor Center and at the Pond, the two most likely places where non-traditional visitors might start their experience.

Gatehouse/Entry Booth

This structure would be staffed during periods of heavy use. Visitors would pay their fee and gather orientation, wayfinding and interpretive information. They could also find out of the upper parking area was full.

Electric tram/shuttle

This would shuttle visitors from the parking areas in the meadow and the Visitor Center during heavy use periods. It could also be run on a continuous loop around the Preserve carrying visitors to different locations.

'No Parking on Roadway' signs

Install these signs along the access road. Consider putting in a curb to help prevent parking and also to create a safer walking area on the side of the road.

Site Map

This is the current map with a modification indicating that the road through the Preserve to Bowman's Hill Tower is closed to visitors.

Explorer's Guide to Bowman's Hill Wildflower Preserve

This is a comprehensive publication that contains orientation and wayfinding information to the Preserve, information on each trail (length, difficulty, time required, highlights, etc.), interpretive information, contact information, etc.

Explorer's Application (App) to Bowman's Hill Wildflower Preserve

This is essentially a digital version of the Explorer's Guide, but with additional features afforded by digital technology, such as vodcasts and podcasts.

Sense-ational Discovery Guide

This publication focuses on helping children discover the outdoors using all of their senses (this could also be in a digital format instead of or in addition to a publication). The goal is for children to become 'Detectives of the Landscape.'

Demonstration Garden Identification sign and Demonstration Garden interpretive panels (3)

The identification sign helps visitors understand what is offered in the area and the panels provide information on different gardens offered in such a way that they communicate key messages regarding the value of using native plants and planting such gardens. Bearing in mind that one of the major objectives is for visitors to use native plants in landscaping, the interpretive opportunities and visitor experiences nearest the existing Visitor Center (the first concentric ring), focus on the value – from the visitor's perspective – of using native plants. The reasons could include, but are not limited to:

- Native plants are better adapted to the area thus making them less susceptible to drought, disease, etc.
- Native plants typically require less water.
- Native plants attract and support native fauna (birds, butterflies and wildlife) (this is particularly applicable to pollinator gardens).

Specialty Garden Kits

These kits consist of a list of plants that would constitute the desired array of plants, instructions on how to plant and tend the garden, and images of what it will look like. It would include a plot map depicting where to plant the different plants. Note that the Demonstration Gardens are demonstrations of Specialty Gardens.

Plant Sale Entryway Sign and structure

Develop an entryway, such as an arch, with identification signage for the plant sale area that clearly marks it as a separate area and attracts attention.

Natural Landscapes Idea Book

A book of laminated pages on a stand, similar to the 'Native Plant Idea Garden' book, will provide visuals of different landscapes created from native plants. The information includes visuals of particular landscapes in all seasons, plus interpretive information on the value of such landscapes.

Natural Landscapes Information Packets

As with the Demonstration Garden Kits, these include a list of plants to use to create certain effects or specific types of natural landscapes, a map depicting arrangements of specific plants, and information on planting and care of the plants. They should include a picture of the mature landscape that can be created using that particular packet. (This is for small areas of landscaping, not complete yards.)

Penn's Woods Interpretive Trail (5 stops with interpretive panels)

Based on the visual features along the route, stories used to communicate themes include conservation, changing practices (we don't nail signs into trees anymore), succession, decomposition, and shade tolerance (and intolerance). To the extent possible it provides thematic overview because it is the most likely trail for most people to take.

Pond Interpretive Trail (5 stops with interpretive panels)

This trail, circling the Pond, uses the connections between native aquatic plants and native fauna to provide Thematic Overview. It also includes information on the importance of native plants in maintaining water quality and similar topics, all driven by the messaging for the interpretive network. As with the Penn's Woods Interpretive Trail, this trail would also offer interpretation using interpretive panels for the same reason – it is likely to be used by non-traditional visitors. It should also be a Universal Access trail because it and the Penn's Woods Interpretive Trail are the easiest to access and therefore most likely to be used by those who have physical limitations.

Trail Orientation and Thematic Overview panels (small)

Each trailhead would at least have a small map with a 'You are Here' so visitors could orient themselves. Most would also include thematic overview information alerting visitors what to look for along each trail and what those features mean.

Trail directional signposts

A signpost at each trailhead identifies the trail for visitors arriving at the trailhead, and directions back to the Visitor Center and other major destinations for people exiting the trails.

Composting toilet

This would be located somewhere in the more remote part of the Preserve.

Action Plan

Priority was based on the following set of general guidelines:

- 1. Actions that improve the visitor experience significantly without significant cost are a high priority.
- Orientation and wayfinding information is a higher priority than interpretive information.
- 3. Interpretive Thematic Overview is a higher priority than interpretive detail.
- 4. Interpretive information closer to the Visitor Center is a higher priority because it can potentially reach more people.
- 5. Lower cost strategies are typically a higher priority because they provide a big bang for the buck and often increase momentum and interest.
- 6. Strategies that are more likely to result in visitors planting native plants are a high priority because that is a key goal.

Many of the actions identified in Phase 1 focus on 'cleaning up' and modifying what is already on-site, such as removing the library and Platt Collection in the building, cleaning up the front porch area, establishing a tour staging area to minimize congestion on the front porch, and redesigning the parking area to improve safety and functionality. In terms of information, the first actions focus on improving the orientation and wayfinding network, improving visitor safety through better signage along the roads, removing signage that isn't effective and developing the Penn's Woods Interpretive Trail and Pond Interpretive Trail because they are the ones most likely to be used by visitors. In terms of longer-term actions, eventually a tram should be acquired to provide transportation around the site, and particularly from the lower parking areas to the Visitor Center area during times of heavy use, and to build and staff a Gatehouse at the entry. Long term, a new Visitor Center is recommended in the area of the Pond to ease the issue of lack of indoor space to effectively serve visitors and maintain all the additional programs offered by the Preserve. A complete Phasing is included in this document.

Introduction

This document contains the plan for developing Visitor interpretive Experiences for Bowman's Hill Wildflower Preserve. The core of the document contains the Visitor Interpretive Experience Goals, the messages (themes) to communicate to achieve those goals, and the recommended strategies organized based on the stage of a typical visitor experience. It also contains design concepts, cost range estimates and the Action Plan. The Appendices contain the bulk of the information on which the plan was based, including mission, values and positioning statements of the Preserve, profiles of target audiences to reach, parameters affecting implementation and functioning of the interpretive network and an inventory of interpretive opportunities based on prominent sensory stimuli, primarily visuals.

One of the goals for the Preserve is for visitors to experience nature in ways that make them more aware of and comfortable with (less afraid of) Native Nature, motivates them to actively support BHWP, and inspires them to engage in acts of stewardship associated with conserving natural resources – especially native plants – both individually and as part of a community. Consequently, the interpretive opportunities have been selected and conceptualized based on moving people along a continuum toward valuing Native Nature in urban (and non-urban) environments as part of their quality of life, and as part of a network that not only motivates them to take actions reflecting stewardship, such as by planting natural landscapes, but helps them do so. For example, if a goal is for residents to use native plants in landscaping, the Preserve could work out an agreement with local nurseries that allows residents to purchase native plants at reduced cost or obtain them for free (specifically plants they do not offer at the plant sales).

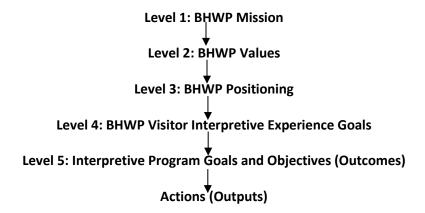
Ultimately, the desire is for visitors to have interpretive experiences that lead to a never-ending string of experiences in natural areas, helping to establish Native Nature as a valued part of a visitor's lifestyle. Not all visitors will venture all the way along the continuum of experiences, but they should always have the opportunity to go further. That goal dictates the following:

- Every interpretive experience should include marketing additional interpretive experiences;
- The Visitor Center should function as a portal into the more natural parts of BHWP;
- The sequence of experiences at BHWP should progress from environments dominated by built features with some Native Nature to environments dominated by Native Nature with minimal built elements. This is the 'Concentric Rings of Development' concept that the Planning Team discussed during the initial work sessions.

Visitor Interpretive Experience Goals

Introduction

The following is the structure of the goal hierarchy that guided selection of visitor interpretive experiences that are consistent with and support the mission and goals of BHWP, and the information network to support those experiences.



The purpose of the approach to presenting a goal hierarchy in this plan is to clearly show the link between the mission of BHWP and the recommended actions associated with developing a network of interpretive opportunities to help create visitor interpretive experiences that result in progress towards the Preserve's mission and goals.

Information on the logic model used to develop the Goal Hierarchy, and on the Mission, Guiding, Vision and Positioning Statements that are part of the Goal Hierarchy can be found in Appendix A. The following section includes just the Visitor Interpretive Experience Goals and the Desired Outcomes.

Visitor Interpretive Experience Goals

Introduction

Interpretation is a tool to cause impact on visitors. Although most people see that as an impact on knowledge, in reality the desired impact is typically on behavior. Consider any entity tasked with conserving natural and/or cultural resources. A major goal in trying to protect the resources is to increase the level of active stewardship practiced by visitors. It's not enough for visitors to simply value the resources; they need to take actions to help restore and protect the resources, and/or to support the efforts of the managing entity. Motivating people to take action of this kind generally requires that they care about whatever they are restoring or protecting to the point that the personal benefit they derive from their actions is worth the time and effort they expend in taking those actions. In this case the key is for visitors to care about native plants in general, and BHWP specifically, to the extent that they consider either or both an important enough part of their quality of life to become active stewards focused on protecting native flora and fauna, and support BHWP through donating, volunteering, and practicing stewardship in their lives.

Interpretation can help that effort by creating strong positive emotional, intellectual and physical connections between visitors and the resources.

Interpretive Network Goals

Interpretive Program Goal 1: Motivate people from the Delaware Valley to use BHWP to obtain cutting edge information on using native plants in landscaping, both by getting information on site and by using resources available remotely, such as information on the web.

Discussion: This Interpretive Program Goal directly supports the desired position of being the 'go-to' place in the Delaware Valley that offers a comprehensive variety of programs about the identification, conservation of, gardening with, landscape use of, ecological importance of and benefits of using native plants in landscaping. The Goal implies that interpretation is a factor in increased use of informational resources, whether on-site or on the web.

Measurable Objectives

As a result of participating in visitor interpretive opportunities at the Preserve, the following will happen:

- An increase in hits on the resource section of the website following implementation of Phase 1 strategies.
- An increase in number of Landscape Professionals using the resource sections on the website for information on using native plants in landscaping.
- An increase in the number of people attending courses and seminars on using native plants in landscaping.
- An increase in people understanding the concept of 'right plant in right place,' which means
 understanding that plants have specific habitats in which they thrive, leading to people planting
 native plants in their yards.

Interpretive Goal 2: Inspire visitors to help protect, rehabilitate and restore the natural world in which they live and work by planting native plants, inspiring others within their communities to do the same, and providing support for their efforts through expert knowledge.

Discussion: Developing active stewards of native flora is fundamental to the mission of BHWP. Specific objectives could include:

- People using native plants in their landscaping;
- Not squashing or killing insects;
- Not planting invasives;
- Voting in favor of legislation and policy that protects the natural environment;
- Telling others about BHWP;
- Tolerating the 'delicate lacy effect' on leaves in the garden/yard plants;
- Not using herbicides, insecticides, or broadleaf week killers on lawns.

Those all become potential topics in the Interpretive Network. In addition, goal highlights a major role for BHWP, which is to provide expert knowledge focused specifically on helping visitors engage in those desired behaviors.

Measurable Objectives

As a result of participating in visitor interpretive opportunities at the Preserve, the following will happen:

- An increase in the sales of Natural Landscape Information packets and Specialty Garden Kits after associated interpretive opportunities are implemented.
- An increase in sales of native plants, including those suggested in Natural Landscape Information packets and those included in Specialty Garden Kits, in the year after Phase 1 strategies have been implemented.
- An increase in use of resources on the web on how to use native plants in landscaping.

Interpretive Goal 3: Motivate visitors to want to learn more about the key topics presented in the interpretive opportunities.

Discussion: This goal was included for a variety of reasons. Increased interest in the topics motivates visitors to become more knowledgeable, which in turn strengthens the intellectual and emotional connection to the Preserve and its resources. Those connections help create an attitude shift towards conserving those resources, and a greater likelihood of supporting BHWP through volunteering for work parties, becoming members, visiting repeatedly and bringing others along, visiting other related sites in the area, and myriad other actions.

Measurable Objectives

As a result of participating in visitor interpretive opportunities at the Preserve, the following will happen:

- An increase in the number of people who use the Resource Section of the website following a visit.
- An increase in sales at the Nature Store of books and publications.
- An increase in the number of people attending seminars, courses or other offerings as a result of engaging with new interpretive opportunities at the Preserve. (This can be measured by a survey asking why people at seminars and other offerings are attending.)
- An increase in number of people submitting questions to an 'Ask a Master Gardener' location on the website.

Interpretive Goal 4: Increased awareness of, appreciation for, and support for the work of the Preserve in restoring and conserving the natural resources on-site.

Discussion: Interpretive Goal 2 focuses on supporting the Preserve through conservation of natural resources and other means, but does not include the entity responsible for managing the Preserve. This goal simply means that the interpretive opportunities have to help ensure that visitors know who is responsible for the high-quality experiences they are enjoying, and motivate visitors to actively support BHWP such as by buying plants because it supports the Preserve, donating money, paying the entry fee, volunteering, becoming members, and engaging in other actions that specifically reflect supporting the Preserve.

Measurable Objectives

As a result of participating in visitor interpretive opportunities at the Preserve, the following will happen:

- An increase in donations.
- An increase in membership.
- An increase in number of volunteers.

Interpretive Goal 5: Significantly increase the use of interpretive opportunities by visitors to the Preserve, especially by target audiences within Pennsylvania, and people living in the Delaware Valley – both on the Pennsylvania and New Jersey sides of the river.

Discussion: This implies that the interpretive program must play a role in attracting and serving *all* audiences, especially those from Pennsylvania (since this is part of a Pennsylvania State Park) and those who live in the Delaware Valley because BHWP focuses on native plants from that area. It also implies that a Universal Design approach be used to ensure that all interpretive opportunities are fully accessible to the extent possible, and ensure that the information obtained in all interpretive opportunities is accessible to everyone.

Measurable Objectives

As a result of participating in visitor interpretive opportunities at the Preserve, the following will happen:

- An increase in the number of interpretive opportunities in which visitors participate (self-report);
- An increase in repeat visitation.

Interpretive Goal 6: Increase the percentage of visitors who visit similar complementary sites in the mid-Atlantic area.

Discussion: This helps achieve Management Goals indirectly by strengthening the relationship with other sites, which hopefully will result in those sites marketing a visit to BHWP, thus increasing visitation and/or use of the BHWP website to gather information on using native plants. It also helps increase the perceived benefits for visiting the area, which should help increase visitation.

Measurable Objectives

This Goal is particularly hard to measure since it either involves surveys by visitors to other similar facilities by those facilities, or it involves self-reporting by visitors. The following are potential objectives, although they may be difficult to measure for without a significant investment of time and/or money. However, a graduate student may be willing to take it on as part of a thesis or dissertation.

As a result of participating in visitor opportunities at the Preserve, the following will happen:

- An increase in the number of visitors who visit other complementary sites as a result of their visit to the Preserve.
- An increase in the number of first-time visitors who hear about the Preserve at other complementary sites.

Message Hierarchy (Themes)

Introduction

Themes (messages) and topics are not the same. A topic is a subject, such as "native plants" A theme is a *statement* or *message* about the subject, such as "native plants are a critical component of a healthy ecosystem." Themes are the core of the stories that are told in the interpretive opportunities.

Themes are derived from goals and objectives by determining the concepts visitors need to understand in order for them to respond in a way that helps achieve those goals and objectives. One of the basic rules in interpretation is to choose messages (points) that connect strongly to the visual features in the landscape because they are the key to proving your point. For example, if you want to talk about the relationship of birds or wildlife to habitat, it is best to have visual evidence of a native species using a native plant (browsed twigs, woodpecker holes, cone stalks, etc.) Consequently, suggestions for themes were evaluated based on stimuli within the Preserve, particularly visual stimuli, that could be used to support specific themes. Sub-themes and supporting stories were then developed to support the key themes. In combination, they provide the guidance for selecting information to be presented.

The elements in the final theme hierarchy include:

Themes (Messages)

These are the key ideas or concepts to be communicated.

Sub-themes

These are concepts that support a theme.

Supporting Stories

These are the stories that communicate a sub-theme or theme.

Note: Many of the messages (themes) contributed by others fall in the category of marketing themes, and should be used to help drive the marketing of the site. They have not been included in this document because they don't define the interpretive content.

Themes

Many natural history-based themes are based on the assumption that people already care about native plants and wildlife, so if they only knew that a species was endangered, they would do something about it. Unfortunately, that isn't true. We are an urban people (85% of the population in the U.S. live in urban areas) with diminishing ties to Native Nature, and diminishing ability to identify native flora from other plants. With the diminished ties to native plant communities comes a diminished sense of connection and personal value of native flora and fauna. What is worse, we have begun to fear Native Nature, in part because it is an unknown. Consequently, the theme hierarchy for BHWP must begin with the message that the nature that is conserved and protected in the Preserve and similar areas is important to a visitor's quality of our life.

Interpretive Theme 1: Native plants are important to your quality of life.

Discussion: If the audience doesn't think native plants are important, based on their personal set of values, the other messages are pointless in terms of achieving the desired outcomes. This version of the message is recommended because it is more direct and focuses specifically on the recipient of the information.

Sub-themes: This theme can have several sub-themes based on what different target audiences consider to be quality of life. People could value plants for food, for personal health, and/or for other components of the environment. Potential sub-themes include the following:

Sub-theme 1-1: Life on earth depends on plants.

Examples of Potential Supporting Stories

- We depend on a lot of plant-based medicines to survive;
- We get all food ultimately from plants (foods from other sources, such as meat and dairy, are still plant-based).
- Places that lack plant life tend to lack birds and wildlife also.

Sub-theme 1-2: Pollinators critical for pollinating local crops depend on native plants to survive.

Note: The focus is on connecting with audiences by the food they eat, so this would be a good theme for interpretive information associated with local bakeries and restaurants.

Examples of Potential Supporting Stories

- The importance of butterflies and moths as pollinators;
- The role of hummingbirds as pollinators;
- The importance of pollinators to crops specific to this area;
- The role of other non-charismatic pollinators, especially native bees;
- Meadows as more supportive habitats than sterile lawns;
- Crops and foods lost from our diets if we lose pollinators.

Sub-theme 1-3: Nature plays a variety of very important roles in a healthy lifestyle.

Examples of Supporting Stories

- Research shows that one of the most effective reducers of stress is bird calls;
- Research shows that simply viewing nature reduces stress;
- Research has long indicated walking is a good activity for maintaining health, so walking in BHWP would both help maintain health and reduce stress;
- The importance of having natural areas to walk and hike where people can see wildlife and wild places;
- The value of nature bathing;
- The spiritual relationship between nature and humans;
- The % of medicines that come from native plants (this could be a part of the interpretation along the Medicinal Trail).

Sub-theme 1-4: Native plants play an important role in a healthy environment.

Examples of Supporting Stories

- Native plants are best suited to provide critical habitat for native birds, fish and wildlife because they developed interdependence from evolving together over thousands of years;
- Native plants are adapted to local weather conditions and are therefore more likely to survive weather events, such as drought;
- Native plants contribute to healthy soils and improved water quality.

Interpretive Theme 2: Plants, and all other biological organisms, depend on their specific habitats to flourish.

This is a key concept that people in general do not understand. All the native birds, fish and other wildlife that people want to save depend, in part, on native plants. In fact, managing bird and wildlife populations is all about managing habitat.

The addition of ". . . all other biological organisms . . ." provides the opportunity to at least hint at the concept that nature is a part of human habitat, and is therefore essential for survival of the human species. The story of the decline of pollinators helps tell that story. In addition, understanding that this concept applies to humans (a biological organism) is an important step in understanding the dangers of global warming, the loss of native flora and fauna, and other negative impacts on the 'habitat' for humans.

The addition of "... specific habitat..." provides the opportunity to emphasize that some species are adapted to very specific habitats, and will go extinct if the habitat disappears.

The best examples are going to be ones where the public values a species in some way. The milkweed and monarch butterfly are perhaps one of the simpler combination of features that helps tell the story of the importance of habitat to wildlife, and of the importance of wildlife to native plants for pollination. One of the advantages of the monarch butterfly-milkweed story is that monarch butterflies are one of the few charismatic micro-fauna, plus, monarchs pollinate a lot of other wildflowers.

Sub-theme 2-1: Native plants depend on specific habitats to flourish.

Potential Supporting Stories

Almost any plant can be used to help convey this message if connections between it and its habitat can be shown. The best stories focus on iconic species or ones that people gravitate toward, such as the bluebells.

Sub-theme2-2: An unhealthy environmental imbalance occurs when any native plant, animal or other organism declines or disappears.

Potential Supporting Stories

It may be possible to use the issue with deer to help convey this sub-theme. The imbalance in regards to deer populations is directly due to human actions, and the consequence is obvious with the presence of the deer fence.

Sub-theme 2-3: Protecting native flora and fauna focuses on protecting and restoring the habitat they depend on.

Potential Supporting Stories

Almost any plant can be used to help convey this message if connections between it and its habitat can be shown. The best stories focus on iconic species or ones that people gravitate toward, such as the bluebells.

Sub-theme 2-4: Native birds, fish and wildlife depend on their specific habitat to survive. Native plants are a key part of those habitats. Put another way, a symbiotic relationship exists between flora and fauna.

Potential Supporting Stories

• The relationship between monarch butterflies and milkweed.

Interpretive Theme 3: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.

Note: This theme cannot be taken out of context. People must understand that the natural plants and associated environment are important to their quality of life, and are endangered, if this message is to have impact.

Sub-theme 3-1: Because you are linked to the environment, you are affected by impacts to it.

Sub-theme 3-2: Our choices can determine what organisms thrive or perish in any environment.

Note: This cannot be presented as a 'doom and gloom' story because research has shown that the doom and gloom approach is not effective.

Another way of stating this is that people are a part of *ecosystems, so everything they do has impact on other parts of the system. Even incremental positive changes can benefit the system. Ideally, we want this to be taken to the individual level, so people feel that they can make a difference by planting native plants in their yards, recycling, conserving water, and engaging in other actions associated with a sustainable lifestyle.

*Visitors may be able to understand the concept of watersheds better than ecosystem so that term could be used instead. Use of the term 'watershed' would be consistent with the focus on the Delaware Valley watershed.

Examples of Supporting Stories

The following are some, but not all of the stories that can support this theme based on the tangible features on the Preserve or other features in the area.

- The absence of many biological organisms in the area outside the Preserve due to modification of habitat by humans;
- The return of native flora and fauna species as habitat is restored;
- The negative impact of invasives introduced by humans on native flora and fauna;
- Many pollinators that are crucial for plants that provide foods we enjoy are endangered due to human activities;
 - **Note:** Proving this story requires showing how pollinators affect foods we enjoy, which could involve any business or institution that sells food, and showing how human activities have both positively and negatively affected pollinators. This should be followed by a Call to Action to let people know what they can do on an individual basis.
- Due to human impact, deer cannot be allowed to roam free in the Preserve or they would destroy many of the native plants we seek to conserve.

Sub-theme 3-3: Your actions have impact on the immediate and surrounding environment. You can make a difference by supporting the Preserve, creating your own habitat garden, learning more, volunteering, etc.

Examples of Supporting Stories

The following are some, but not all of the stories that can support this theme based on the tangible features on the Preserve or other features in the area.

- The positive impact of not using pesticides, herbicides, insecticides and broadleaf weed killers;
- The positive impact of composting;
- The positive impact of trying to maintain a carbon-neutral lifestyle (this can be coupled with the impact of global climate change on a single species of plant, that through a ripple effect causes wide-ranging impact on the ecosystem);
- Helping out by becoming a member (the benefits of membership)

Sub-theme 3-4: Because individual actions add up incrementally to significant impacts, you can play an important role in conserving local native plants and protecting the local environment.

There are myriad ways of saying this, including, "you are either a part of the solution or part of the problem." The one used in the sub-theme speaks specifically to the reader and is positive. Regardless of how it is worded, the key is to empower people so they have confidence that whatever small part they can play is important in the grand scheme of things. This will be important when trying to motivate people to plant native plants in their yards and take other small steps that help the environment.

Potential Supporting Stories

Any actions taken by residents on a daily basis that cause positive and/or negative impact on the natural environment can be used to support this message.

Sub-theme 3-5: Bowman's Hill Wildflower Preserve is working to conserve and restore native plants and habitat. This effort helps to conserve the native birds and wildlife we value for today and for future generations.

Interpretive Theme 4: Everything in an ecosystem is linked. Eliminating one element has a ripple effect throughout the ecosystem.

This is a fundamental concept that people must understand if they are to understand the importance of planting native plant *communities* in their yards rather than single plants (although the latter is probably better than nothing).

Potential Supporting Stories

Any connection between elements in an ecosystem can be used to tell this story, for example, the relationship between monarchs and milkweed. However, to truly get the key idea across it will be necessary to show elements many steps removed from a particular organism being affected by its loss.

Visitor Interpretive Experience Network

Introduction

This section contains the recommendations for Visitor Interpretive Experiences to develop and the actions to be taken and strategies to be developed to create that array of Visitor Interpretive Experiences. The recommendations were developed using the following set of guidelines:

- 1. Interpretive opportunities were selected to communicate the themes in the theme hierarchy by communicating the supporting stories.
- 2. The connection between humans, specifically the quality of life of humans, and native plants was emphasized whenever possible, with emphasis on human life today.
- 3. Active stewardship by visitors is the end goal of the interpretive network, which manifests itself within the network in such ways as showing people what they can do in their own backyards with native plants, what they can do to stop proliferation of invasives, how they can provide support through donations, volunteering, etc.
- 4. The proposed Visitor Interpretive Experiences reflect a series of concentric rings of intensity and visibility of interpretive media, with the most detailed and visible interpretive opportunities in the ring closest to the two primary initial areas of visitor concentration the current Visitor Center and associated parking area, and the Pond where events such as weddings are frequently held.
- 5. The long-term vision is to build a new Visitor Center in the Pond area, which reflects the best layout of the site for facilitating effective Visitor Interpretive Experiences. However, achieving that vision will take a significant amount of time and effort. In the short- and medium-term an array of practical and feasible projects that will significantly improve the Visitor Interpretive Experiences and help meet the goals for the program have been proposed. In other words, a phased approach has been taken with the end goal in mind, but with a pathway of doable steps.
- 6. The recommended array of Visitor Interpretive Experiences and associated actions reflect a set of 'Stepping Stones of Engagement.' It includes an array of easily accessible (mentally and physically) interpretive opportunities that constitute 'beginning' or 'starting' points that seek to engage visitors into the network, followed by an array of logical 'next steps' that move visitors toward the desired end point of being active advocates for native plants specifically, and sustainable lifestyles in general.

The plan is organized to reflect the stages of a typical visitor experience, which are as follows:

Stage	Information Needs	Comments
Pre-Trip	Marketing information Trip planning information.	Much of this information is on your website.
Travel	Orientation and wayfinding information.	Many people now use GPS, but signage at major intersections is still important.
Arrival	On-site wayfinding to parking and facilities; restrooms; map and site-specific trip planning information.	The Arrival part of the experience is when visitors first meet their needs for restrooms, and wayfinding and orientation information. It is also the point in the experience when they would be interested in the Explorer's Backpack and materials that guide them around the site.

Primary	Interpretive information along with continued orientation and wayfinding information around the site.	The interpretive information begins with Thematic Overview followed by detail.
Departure	Directions to the highway.	This is the point they are most likely to purchase items, donate money, consider upcoming events, etc.
Return	Wayfinding.	Not typically your responsibility, but it is a part of the visitor experience so you don't want it to be negative. At the least the information network should help them turn the correct direction when exiting the site.
Post Trip		Ideally, you will have obtained their email address so you can keep them apprised of upcoming events, work parties, programs, etc.

Pre-Visit Experience

Current Pre-Visit Experience

Potential visitors can find out about Bowman's Wildflower Preserve from a wide array of sources, including friends, off-site Pocket Gardens, and outreach strategies, which BHWP has many. Once aware of the site, most people will check out the website for more information. The website contains almost all the information a potential visitor could want to plan their visit while at the same time making the viewer aware of all the opportunities offered by the Preserve, such as lectures, programs, etc.

Issues

The issues associated with the current Pre-Visit Experience at this point are primarily in regards to visitor expectations. Specifically, the following are potential issues:

- The current website gives the impression that people can expect to picnic at the Pavilion when it's not in use, but visitors have difficulty finding out if it is reserved on the date they are planning to visit.
- The concept of a 'picnic' comes with an expectation of being able to engage in recreational activities in the meadow, some of which might damage the resource.
- Many visitors are likely to expect to be able to access the Pond. This is not possible when
 weddings are happening, but there isn't an obvious place on the 'Plan Your Visit' page that
 alerts visitors to this possibility, nor a place where they can see if a wedding is planned for the
 time they are considering visiting.
- Families with children may expect that their children will have the opportunity to be somewhat 'feral,' which is only really possible in the meadow and around the Pond two areas not accessible during weddings.

Note: The Preserve has expressed a desire to eliminate parking on the roadways. If that happens, the website will need to be altered to eliminate the note that people can park on one side of the entry road.

Proposed Future Experience

Weddings have been restricted to one weekend per month, and that information is noted on the 'Plan Your Visit' page along with a description of visitor experiences available and not available during times that the wedding venue is being used. Those weekends are noted in the calendar of events that is included on that page. On weekends when weddings are scheduled, BHWP offers unique programs for families to help maintain the attraction power of the site during those times. (These may already exist and if so, need to be marketed heavily for those weekends that weddings are taking place.)

Actions and Strategies

The following actions and/or strategies are required to achieve the proposed future experience:

- 1. Limit weddings to a specific weekend in any given month.
- 2. Modify the website to provide an obvious way for visitors to find out if the Pond and Pavilion are available during the time they plan to visit.
- 3. Consider offering special programs for families on wedding weekends.

Travel Experience

Current Travel Experience

Many visitors probably use GPS to find the site, which is facilitated by the inclusion of GPS coordinates and street address on the website. Highway approach signs warn visitors of the approaching turn, and a sign directs visitors to the access road.

Issues

- The primary issue is not with BHWP, but rather the inadequate signage marking the turn to Bowman's Tower for visitors traveling from Washington Crossing Historic Park, resulting in a significant number of people arriving at the Preserve looking for the Tower.
- The entry is not as obvious as it could be, causing some people to miss the turnoff.

Future Travel Experience

The future experience is essentially the same, but new signage by Washington Crossing Historic Park has significantly reduced the number of visitors who show up at the Preserve looking for the Tower and more prominent **Entry Signage** is used to mark the entry.

Summary of Strategies

Entry Signage

Work with the Pennsylvania DOT to develop approach signage indicating that the turn to BHWP is in ¼ mile. It should also indicate the direction of the turn so visitors don't confuse it with the entry to the Thompson-Neeley Homestead.

Arrival Experience

Current Arrival Experience

Visitors arriving by vehicle follow Continental Drive, a winding 1-way road, past the Moore Pavilion and Penn's Woods before arriving at the parking area associated with the Visitor Center. The parking area is gravel, and does not have designated spaces, pedestrian walkways or staging areas, so children getting out of a car may have to wait in the parking area until others in their group are ready. Some first-time visitors are confused and park by the Moore Pavilion, along the road, in front of the entry gate and at other locations that potentially detract from their visitor experience by forcing them to walk a significant distance to and from the Visitor Center.

The first stop for most visitors is the Visitor Center, specifically the restrooms. The atypical location of the restrooms outside the Visitor Center causes them to be missed by some visitors, who are then sent back to the facilities by staff. In the small staffed Orientation / Welcome area visitors can obtain a site map and a variety of publications that focus on different opportunities in the Preserve. They can also

check out an Explorer's Backpack. The store is located in this space, so visitors know that the Preserve has such an opportunity if and when they are interested in purchasing something.

Issues

- Some visitors are confused upon arrival regarding where to park and end up parking at one of the lots in the meadow.
- Parking at the Visitor Center can be filled to capacity during events and plant sales, causing
 parking on the road and elsewhere. Parking on the road increases vehicular congestion and
 issues with safety.
- The capacity of the restrooms is probably not sufficient during heavy use periods.
- The location of the restrooms is not typical so many visitors end up going inside and asking staff where the restrooms are located.
- Not all staff /volunteers are able to answer basic questions regarding the Preserve.
- The Orientation / Welcome Area is essentially the foyer between the entry door and the main room in the Visitor Center, which means it is a travel corridor. This could cause congestion issues during peak use periods, when people may be trying to pay their fee while others are picking up orientation information, trying to ask questions, purchase items from the store and trying to access the main room.
- The current configuration of the lobby / bookstore area, with the location of the information
 desk (which is not a necessary element in this space) can give the impression that visitors are
 not supposed to go into the bookstore. The presence of the desk also takes up space,
 contributes to congestion and has a negative impact on visitor flow.
- Some visitors show up looking for Bowman's Tower.
- People waiting for tours often cause congestion around the restrooms and entryway.
- Some people coming from the Grist Mill, Washington Crossing Historic Park, the Thompson-Neeley Homestead and Bowman's Hill Tower think that the fee they have paid covers the Preserve.

Proposed Future Arrival Experience: Short Term

Shortly after turning off the highway, arriving visitors encounter an **Access Road Directional Sign** noting the direction and mileage to the Visitor Center so they do not inadvertently park in the meadow area thinking the Center is nearby. As they approach the walkway between the Visitor Center and Penn's Woods Trail, they encounter **a Pedestrian Crossing Sign** combined with a **5 MPH sign**. As they approach the turn into the parking area, they encounter a sign indicating that the parking area is to the left, and that another pedestrian crossing is coming up after they turn so they can be prepared to stop if necessary.

After parking in the newly laid out and marked parking area, (and having children waiting in **staging areas** if necessary) they follow **pedestrian walkways** around the edge of the parking area until reaching the crosswalk to the Visitor Center. A **Visitor Center Directional Signpost** between the parking area and building notes that the Tour Staging Area is to the left, the restrooms are ahead and to the left a bit, the Visitor Center is ahead, and the plant sales area, and trailheads to the Azalea Trail and the Parry Trail are to the right. It is not expected that most visitors need to know where the Azalea Trail are at the point in their experience, but it does alert them to the fact that there are trailheads emanating from the plant

Sales area. Also, the Parry Trail is very popular when the bluebells are blooming so this signpost will give visitors looking for that trail a head's-up on location as they arrive.

Upon entering the **remodeled lobby/bookstore area** in the Visitor Center, visitors have the option of talking with someone to gather information or pick it up from a Self-Serve Orientation Area. The remodel, which included removing the information desk, has reduced congestion and improved visitor flow through the lobby and the bookstore. The person answering questions as well as all other personnel on site have been trained to answer basic visitor questions through use of a **Personnel Resource Book.** Within this area visitors can obtain the **Sense-ational Discovery Guide**, the **Explorer's Guide to BHWP** and a simple **Site Map** showing all trails. They can also download the **Explorer's App to BHWP**. **Tours and programs for the day** are noted on a changeable panel and a whiteboard contains a **list of bird species** that have been seen that day as well as **wildflowers in bloom**.

During heavy use periods, a temporary staffed **Welcome Booth** provides the opportunity to gather all the previously mentioned information without going in the building, thus reducing congestion in the lobby area of the building during those periods. For those that go in the building during those times, congestion has been reduced by eliminating the library to reduce the number of functions going on in the entry area. Congestion outside has been reduced by developing a **shaded Staging Area**, with places for visitors waiting for tours to sit. The Staging Area is located directly across from the restrooms in what is now a small garden area.

If visitors choose to enter the building, they have the option of spending time looking out the observation windows and using the **Native Habitat for Native Birds and Wildlife Interpretive Panels** to identify species, spending time in the **children's play area**, and/or viewing **Thematic Overview Exhibits** along the top of the storage spaces along the wall.

Outside, visitors encounter a **Site Orientation Panel** to help facilitate the next stage of their experience (one is also located at the Pond for use by wedding guests).

Note: The Preserve would function better with improved office space. The most obvious, and perhaps the best place for additional offices is in the area where the Platt Collection now resides. As noted elsewhere in the plan, the Platt Collection should be deaccessioned.

Summary of Strategies

Website modification

Modify the website to make it clearer to visits that the Visitor Center and associated parking area are beyond the fence separating the meadow from the rest of the Preserve.

Access Road Directional Sign

Visitors would encounter this sign as they approach the fork in the road. It would note both the direction and distance to the Visitor Center. Visitors would then be less likely to stop at one of the parking areas in the meadow.

Access Road Pedestrian Crossing Sign

This is located right before visitors (in vehicles) arrive at the crossing from the Visitor Center area to the Penn's Woods Trail. As noted, it has a 5 MPH speed limit sign.

Parking Entry Sign plus Pedestrian Crossing Sign

This sign, located on the right side of the road across from the Parking Area, has a directional arrow, a sign indicating parking, and another sign indicating a pedestrian crossing ahead. It could also have an 'Entry Only' sign to help remind people that it is a 1-way road.

Parking Area modifications

Modify the parking area by delineating pedestrian walkways within and/or adjacent to the parking area that are protected from cars. This can be as simple as using planters to create protected walkways. Also create small protected staging areas associated with the parking area that families and groups with children can use as waiting areas for their children while unloading or loading vehicles.

Visitor Center Directional Signpost

This directional signpost is located between the parking area and Visitor Center so visitors encounter it as they approach the building from the parking. The sign indicates the direction to the Tour Staging Area (to the left), the Visitor Center (ahead), the restrooms (ahead and slightly to the left), the plant sale area (to the right), and the trailheads to the Azalea and Parry Trails at a minimum. Ideally, this will cause visitors to focus to the left to find the restrooms, and will bring their attention to the Tour Staging Area so if they are coming for a tour, they know not to wait on the porch area, thus effectively blocking visual access to the restrooms. (Consider removing the bench on the front porch to further discourage people waiting for tours to start to wait in that area.)

Welcome Kiosk

This is a small sheltered structure in front of the Visitor Center to a visitor's right as they approach from the parking area. The kiosk can be staffed during periods of heavy use so visitors do not need to go inside the building to gather orientation, wayfinding and interpretive information, thus reducing congestion during those time periods. The information can also be offered when the kiosk is unstaffed.

Personnel Resource Book

This contains basic information about the Preserve, including the answers to frequently asked questions (FAQs). Staff and volunteers would be expected to review the notebook to make sure they know the answers to FAQs.

Eliminate Library

Eliminate the library altogether or move it somewhere else.

Site Orientation Panel

This is a map of the site depicting all features, distances between features and images of key destinations to entice people to seek out those places. They are located at the Visitor Center and at the Pond, the two most likely places where non-traditional visitors might start their experience.

Remodel Lobby/Bookstore Area

At the very least the counter separating the passageway from the bookstore should be removed to allow for easier visitor circulation. The person staffing the store can sit at the desk, or could perhaps be moved to the nook to the left of the current visitor entryway.



The current counter and single entryway constrict visitor circulation in the store

Shaded Staging Area

Given that the area adjacent to the Visitor Center where the picnic table is located cannot be used as a staging area, the narrow space between the parking area and Visitor Center and the need to solve the issue of tour participants causing congestion by waiting on the sheltered porch area, the best location, by default, is directly across from the restrooms in what is now a small garden area (see image below). This area should have shaded /sheltered benches. The trail currently located in this area should be maintained as an opportunity for children to move around while waiting.



Location for Tour Staging Area

Proposed Future Arrival Experience: Medium Term

During heavy use periods, arriving vehicles stop at a staffed **Gatehouse** where visitors gather orientation and wayfinding information, find out if parking is still available at the Visitor Center, and pay their fee. For those parking in the meadow lots, an **electric tram/shuttle** (or something similar) provides transportation to the Visitor Center. Parking along the roadway has been eliminated and **'No Parking' signage** to that effect has been posted along the roadway.

Summary of Strategies

Gatehouse/Entry Booth

This structure would be staffed during periods of heavy use. Visitors would pay their fee and gather orientation, wayfinding and interpretive information. They could also find out of the upper parking area was full.

Electric tram/shuttle

This would shuttle visitors from the parking areas in the meadow and the Visitor Center during heavy use periods. It could also be run on a continuous loop around the Preserve carrying visitors to different locations.

'No Parking on Roadway' signs

Install these signs along the access road. Consider putting in a curb to help prevent parking and also to create a safer walking area on the side of the road.

Proposed Future Arrival Experience: Long Term

Visitors turn right at the fork instead of left to access a new Visitor Center near the Pond. They take care of their needs, gather all information and start their Primary Experience from that point. The plant sale area and nursery remain in their current location. The current Visitor Center becomes an educational facility, where all classes, talks, etc. are held.

Summary of Strategies

Visitor Center

Design and construct a new multipurpose building and associated parking area outside the fence near the current Exit Gate between President's Drive and Aquetong Road. The facility includes a Visitor Center, offices, Nature Store, etc. This option for the future involves significant expenditure of money and a shift in the organization of the site, but would be more efficient from a visitor interpretive experience perspective.

Convert the existing Visitor Center into an Educational Facility. Self-explanatory.

Primary Experience

Current Primary Experience

After taking care of needs and obtaining desired orientation, wayfinding and self-guided interpretive strategies a visitor has the option of engaging in the visitor opportunities in the Visitor Center if the space is not being used for a class or meeting. Those opportunities include:

- Going downstairs to view Platt Collection of mounted birds, nests and eggs;
- Watching for birds at the feeding stations outside the windows of the main room;
- Viewing educational exhibits in the main room;
- Using the children's library in the main room.

Upon exiting the building they can take in the Demonstration Gardens with associated interpretive information directly in front of the facility, view the Native Plant Idea book on a stand and/or check out the plant sales area. They also have the option of walking anywhere on the Preserve. That experience could involve using one or more of the following publications:

- Self-Guided Tour of Penn's Woods Tree Trail
- Self-Guided Tour of Pennsylvania Native Ferns at BHWP
- The brochure on the Green Labyrinth
- The bird checklist for the area
- The brief 'Family Exploration Guide'
- The Visitor Guide and Map

On the grounds they have the opportunity to engage with a number of interpretive panels in different locations, including, but not limited to:

- Interpretive panels on the Louisiana Waterthrush and native birds at the birding platform
- Interpretive panels on aquatic plants and wildlife at the Pond
- Interpretive panels at the Founder's Pond
- Interpretive panels along the trails south of the Visitor Center, along the stream
- A series of panels along the Marsh Marigold Trail
- A panel on the Forest Community

Finally, the Preserve does offer guided walks and talks, and stages events periodically.

Issues

- The front view of the Visitor Center is not as appealing as it could be due to the presence of so many different features trash can, recycling bin, doors to restrooms, bench, case with panel behind bench, panel with mission of the Preserve, and bulletin board with future events.
- The interpretive opportunities in the Visitor Center, the library, and the Children's library are not available when meetings or classes are being held in the main room. This can be a more significant issue during inclement weather because indoor / sheltered space is very limited in the Preserve.
- In general, exterior interpretive panels appear to have been designed by different people at
 different times because most the styles differ, contributing to somewhat of a hodge-podge look.
 This is exacerbated by tacking some low-cost signage onto existing signage, or placing such
 signage in close proximity to existing, more established signage.

- The publications are oriented more toward identification and information rather than interpretation.
- As with the signage, the format and style vary from publication to publication.
- Although most interpretive signs focus on wildlife and habitat, there appears to be a lack of cohesion, perhaps because of the many different styles.
- The interpretive opportunities tend to be 'stand-alone' rather than developed as part of a network of interpretive opportunities. This is not to say that they should not be able to function as stand-alone opportunities since it is not possible to predict where visitors will go or what they will do.
- Some of the major cultural features that are likely to spark visitor interest, notably the historic guard station, have little information available.
- The Preserve is spread out over a significant area, thus, to walk the entire Preserve would take hours. This is a plus in terms of encouraging repeat visits, but perhaps a negative in that some of the areas furthest from the parking are underutilized.
- Lack of restroom facilities beyond the Visitor Center are likely to discourage visitors from visiting more remote parts of the Preserve, or to spend a lot of time in the Preserve.
- Not all staff know the answers to basic questions about the Preserve.
- The designated Universal Access (Penn's Woods trail) is not actually Universally Accessible.
- The existing map indicates that visitors can drive the road through the Preserve to access Bowman's Hill Tower.
- Many pathways look 'abandoned' or are beginning to look overgrown due to lack of maintenance (which is linked to a lack of staff and volunteers to fully maintain all the trails in the Preserve).
- Some of the benches are becoming worn out (the one in the plant sale area for example).
- The trailheads in the Plant Sale area do not stand out.
- Some of the less visually appealing parts of the Preserve are too visible, such as the maintenance yard from the area in which the historic Ranger Station is located.



The Azalea Trail trailhead in the Plant Sale Area needs to stand out and look more inviting. The white sign should also be removed or moved.

Proposed Future Experience: Short – Medium Term

Note: Because of the limited space in front of the Visitor Center, and the lack of access at all times to the interior, a space doesn't really exist for a focused Thematic Overview interpretive opportunity that is always accessible to all audiences. Consequently, interpretation associated with any interpretive experience will include a thematic overview of the themes associated with that particular experience. In addition, the Penn's Woods Interpretive Trail and the Pond interpretive Trail will provide thematic overview.

The Visitor Center remains where it is for the short to medium term. Visitors will park in the parking area at the Visitor Center or one of the parking areas in the meadow (and be transported by tram/shuttle to the Visitor Center), visit the restrooms, obtain orientation information (map), pick up or download interpretive guides (including vodcasts and/or podcasts), pick up an Explorer's Backpack, and begin their Primary Experience either by visiting the interpretive opportunities in the building or heading outside.

Inside the building visitors have the opportunity to look out the observation windows to see what birds and wildlife might be feeding on the feeders or visible in the surrounding landscape. **Native Habitat for Native Birds and Wildlife Interpretive panels** (either low-angled in front of the windows or side-angled between windows) provide clues for identification plus interpretive information focusing on the fact that the Preserve contains native plants and consequently, it attracts native birds and wildlife. They can also take in **Thematic Overview Exhibits** located along the opposite wall.

The publications have been re-designed into a family of publications. Previous publications have been combined. Three publications of note are the **Site Map**, the **Explorer's Guide to Bowman's Hill Wildflower Preserve** (which should include information from many of the existing publications) and the **Sense-ational Discovery Guide**, a publication focused on helping children discover the outdoors using all of their senses (this could also be in a digital format instead of or in addition to a publication).

The opportunities for downloading onto a smart phone or other device include the **Explorer's Guide to Bowman's Hill Wildflower Preserve** and an **Explorer's Application (App) to Bowman's Hill Wildflower Preserve** that contains vodcasts and podcasts and other strategies. The site in general, each major area and each major trail has an associated digital guide.

Both inside and immediately outside the Visitor Center visitors encounter an easily changeable display lets them know **What is in Bloom** and where that plant can be seen, and **Sightings of Birds and Wildlife**, which also includes where they have been seen. Also Immediately outside the Visitor Center, visitors encounter the Site Orientation Panel. They now have two major starting options for exploring the Preserve. To their right is the access path to Penn's Woods Interpretive Trail and the Pond; to their left are Demonstration Gardens, the plant sale area and access to the rest of the Preserve via trails. (The Cabin Trail along the north fence that encloses the nursery area has been closed and rehabilitated.)

To the left, they notice the **Demonstration Gardens identification sign** and have the opportunity to view Specialty Gardens that use native plants, such as a Pollinator Garden. Interpretation is delivered in multiple formats including **interpretive panels** and information accessed digitally on the website, which includes instructions on how to plant each garden. The Nature Store sells **Specialty Garden Kits** that include directions on what to use and how to plant various specialty gardens, including a Pollinator Garden. Along the left side of the path to the plant sale area are vines growing on the brick wall, with a **'Native Vines in Landscaping,'** interpretive panel focusing on the use of native vines in landscaping

The plant sale area is marked by a **Plant Sales Entry Arch** or other architectural feature with the name of the area, and a message proclaiming it as a place for visitors to 'build their own habitat!' In the plant sale area a laminated **Natural Landscapes Idea Book** helps visitors visualize potential landscapes. (Although it would be ideal to plant Demonstration Landscapes so visitors can see the actual product, space precludes doing so.) Given that it is likely that visitors are more likely to plant landscapes with native plants if they can see the actual result, it is important to show them what different landscapes look like in different seasons. Visitors can also buy specific **Natural Landscape Information Packets**, that include a list of plants to use for particular landscaped areas, a map depicting arrangements of the plants, and information on planting and care of the plants. For those that visit the Plant Sale area, the trailheads to the Parry Trail and Azalea Trail are easily discernable and look intriguing.

Visitors taking the fully accessible multi-sensory **Penn's Woods Interpretive Trail** can gather information from interpretive panels and/or the Explorer's Guide or Explorer's App. The trail ha 6 Interpretive Stations with interpretive panels that, as a whole, provide a thematic overview for the interpretive network. The collection of panels includes ones on succession, the importance of plant diversity, moss as a decomposer, the importance of fungi and snags, and the problems caused by invasives. At the Pond, they can take the fully accessible **Pond Interpretive Trail**, again gathering information from interpretive panels that continue to focus on native plants and habitats. Visitors can also walk down to the historic log cabin where **Conservation Thematic Overview Interpretive Panels** provide information associated with early conservation efforts. Vegetative screening in that area reduces the visual impact of the maintenance yard. Note that the Cabin trail has been closed and rehabilitated.

As visitors move further from the Visitor Center, interpretation is provided primarily through publications and digital media (podcasts, vodcasts, augmented reality, etc.) rather than signs due to the desire to facilitate immersion in nature. The exceptions are entry points to different trails, where a **Trail Orientation and Thematic Overview Panel** provides orientation to the trail and thematic overview of the stories and key messages communicated in the interpretation associated with that trail. The trailhead signs also include an inset map of the site with a 'You Are Here.' Every trailhead also has a small signpost indicating the name of the trail for arriving visitors, and directional information (to Visitor Center, to restroom, etc.) for visitors returning on the trail. A **composting toilet** located in the more remote parts of the Preserve encourages visitors to explore more of the site and to stay longer.

Instead of walking all around the grounds, visitors can choose to hop on and off an electric tram/shuttle that provides transportation to all parts of the Preserve. Interpretive information is offered by the driver along the way. The tram/shuttle allows for better use of the parking areas located near the entry way by providing shuttle service during periods of heavy use and would potentially distribute use to under-used parts of the Preserve. If management of Bowman Tower was transferred to the Preserve, the tram/shuttle would be an effective strategy for moving people to that attraction and back. Note that the tram/shuttle could run on a continuous loop picking up and dropping off people, and could also be used on occasion for guided interpretive tours. Note that this would not work well if people parked in the road and/or used the road for a walking path, but this might be a solution for both.

Visitors can also be coming for a scheduled event, guided tour, talk, or course. For those taking **Guided Walks**, tour guides have undergone training in the new messaging and modified the interpretive material to better reflect the themes. **Thematic Overview Exhibits** in the main room in the interior of the building will focus on thematic overview so that people attending events in that space will have easy

access to key concepts that they can view during breaks and lunch, and that provide a basis for understanding interpretive detail in any of the outdoor experiences that they choose to engage with.

Summary of Strategies

In General

Standardize signage used in the Preserve and eliminate signage tacked on to other signage. This does not mean all signs have to have the same template, but rather they should all be designed to stand alone as part of their own network and not look like an afterthought.

Site Map

This is the current map with a modification indicating that the road through the Preserve to Bowman's Hill Tower is closed to visitors. The other major revision is to eliminate the Cabin Trail on the map.

Native Habitat for Native Birds and Wildlife Interpretive Panels

These panels are located proximate to the observation windows. They help visitors identify the birds and wildlife they might see through the windows, and explain why the native habitat at the Preserve is vital to native birds and wildlife. They also contain an invitation for visitors to invite native birds to their homes by planting native plants.

Thematic Overview Exhibits

These exhibits, located on the wall opposite the window wall in the main room of the existing Visitor Center, provide an overview of the key messages communicated in the interpretive network.

Explorer's Guide to Bowman's Hill Wildflower Preserve

This is a comprehensive publication that contains orientation and wayfinding information to the Preserve, information on each trail (length, difficulty, time required, highlights, etc.), interpretive information, contact information, etc.

Explorer's Application (App) to Bowman's Hill Wildflower Preserve

This is essentially a digital version of the Explorer's Guide, but with additional features afforded by digital technology, such as vodcasts and podcasts.

Sense-ational Discovery Guide

This publication focuses on helping children discover the outdoors using all of their senses (this could also be in a digital format instead of or in addition to a publication). The goal is for children to become 'Detectives of the Landscape.'

What's in Bloom

This is not interpretive, but rather an easily changeable tool to motivate visitors to include viewing these wildflowers as part of their visit. Ideally, an image of the plant would be used along with the name and location.

Sightings of Birds and Wildlife

This is not interpretive, but rather an easily changeable tool to make visitors aware of the birds and wildlife they might be able to see. Of particular importance are native fauna that use the native plant of

the Preserve as habitat. Ideally, an image of the species of bird or wildlife would be used along with the name and location.

Demonstration Garden Identification sign and Demonstration Garden interpretive panels

The identification sign helps visitors understand what is offered in the area and the panels provide information on different gardens offered in such a way that they communicate key messages regarding the value of using native plants and planting such gardens. Bearing in mind that one of the major objectives is for visitors to use native plants in landscaping, the interpretive opportunities and visitor experiences nearest the existing Visitor Center (the first concentric ring), focus on the value – from the visitor's perspective – of using native plants. The reasons could include, but are not limited to:

- Native plants are better adapted to the area thus making them less susceptible to drought, disease, etc.
- Native plants typically require less water.
- Native plants attract and support native fauna (birds, butterflies and wildlife) (this is particularly applicable to pollinator gardens).

Specialty Garden Kits

These kits consist of a list of plants that would constitute the desired array of plants, instructions on how to plant and tend the garden, and images of what it will look like. It would include a plot map depicting where to plant the different plants. Note that the Demonstration Gardens are demonstrations of Specialty Gardens.

Native Vines Interpretive Panel

This panel focuses on the use of vines in landscaping, primarily as plants to soften human built structures, such as brick walls. The information also includes what native fauna they support.

Plant Sale Entryway Sign and structure

Develop an entryway, such as an arch, with identification signage for the plant sale area that clearly marks it as a separate area and attracts attention.

Natural Landscapes Idea Book

A book of laminated pages on a stand, similar to the 'Native Plant Idea Garden' book, will provide visuals of different landscapes created from native plants. The information includes visuals of particular landscapes in all seasons, plus interpretive information on the value of such landscapes.

Natural Landscapes Information Packets

As with the Demonstration Garden Kits, these include a list of plants to use to create certain effects or specific types of natural landscapes, a map depicting arrangements of specific plants, and information on planting and care of the plants. They should include a picture of the mature landscape that can be created using that particular packet. (This is for small areas of landscaping, not complete yards.)

Penn's Woods Interpretive Trail

Based on the visual features along the route, stories used to communicate themes include conservation, changing practices (we don't nail signs into trees anymore), succession, decomposition, the issues with invasives, and shade tolerance (and intolerance). To the extent possible it provides thematic overview because it is the most likely trail for most people to take. In addition to providing the interpretive information in the Explorer's Guide to Bowman's Hill Wildflower Preserve and the Explorer's Application (App) to Bowman's Hill Wildflower Preserve, interpretation will be provided

using a sequence of interpretive panels. The panels should be designed to work from either direction so as to attract people visiting the Preserve and also people attending events in the Pond area. A primary reason for using panels is that this is one of the two trails most likely to be used by non-traditional visitors attending weddings, and signs do not require them to download and app or pick up a publication. Note that this trail must be modified to make it an actual Universal Access trail. Until that time, the sign designating it a Universal Access trail should be removed. Also note, it is important to reinforce the directive that visitors should stay on trails and not bushwhack. Consequently, Interpretive Stations have a larger cleared and hardened area for visitors on tours to stand when listening to the tour guide.

Pond Interpretive Trail

This trail, circling the Pond, uses the connections between native aquatic plants and native fauna to provide Thematic Overview. It also includes information on the importance of native plants in maintaining water quality and similar topics, all driven by the messaging for the interpretive network. As with the Penn's Woods Interpretive Trail, this trail would also offer interpretation using interpretive panels for the same reason – it is likely to be used by non-traditional visitors. It should also be a Universal Access trail because it and the Penn's Woods Interpretive Trail are the easiest to access and therefore most likely to be used by those who have physical limitations. Note, given the desire to reinforce the directive that visitors should stay on trails, the current signage around the Pond that cannot be accessed without going off trail should be removed.

Conservation Thematic Overview Interpretive Panels

This cluster of panels is located at the historic ranger station. Among other topics, it uses the presence of the cabin to focus on early conservation efforts, and the chestnut used in the cabin to focus on human impacts to the environment and the subsequent need for conservation.

Trail Orientation and Thematic Overview panels,

Each trailhead would at least have a small map with a 'You are Here' so visitors could orient themselves. Most would also include thematic overview information alerting visitors what to look for along each trail and what those features mean.

Trail directional signposts

A signpost at each trailhead identifies the trail for visitors arriving at the trailhead, and directions back to the Visitor Center and other major destinations for people exiting the trails.

Electric Tram/shuttle

This would be used to shuttle visitors back and forth between the meadow parking areas during heavy use periods, and for moving people around the Preserve. It could also be used for giving **Tours.**

Tour Guide training

The point is to modify existing tours to better reflect the new messaging. At some point, holding a National Association for Interpretation Certified Interpretive Guide workshop for staff and volunteers should be considered.

Composting toilet

This would be located somewhere in the more remote part of the Preserve.

Plant Sale Area

Replace or refinish the bench that is looking worn out. Also, landscape the area around the trailheads to the Parry and Azalea Trail so they stand out, perhaps by creating an inverted 'V' look to the trails. As with the arch / entry to the Plant Sale Area, the exit from the area should be clear so the Plant Sale Area is clearly demarcated. That helps the visitor know they are moving into another part of the experience on the Preserve.

Front Porch

Clean up the front porch area by doing the following:

- Move the trash can and recycling to a less obtrusive (but still easily findable) location;
- Remove the bench (it encourages people to sit and congregate on the porch, reducing the effectiveness of the information posted there);
- Exchange the Mission Panel with the list of events (you want the event information in line-ofsight of people approaching the front porch from the parking area) and make that information stand out;
- Upgrade the case for the information currently situated above the bench and consider information related to safely exploring the Preserve.

Area with Ranger Station

In addition to located the Conservation Thematic Overview panels here, the following should be done:

- Close off and rehabilitate the Cabin Trail.
- Plant vegetation to screen the fenced in Maintenance Yard.



Significant infrastructure changes and fixed interpretive and orientation strategies

Proposed Future Experience: Long Term

In the distant future, visitors would begin their experience at a new Visitor Center located near the existing Exit Gate, so the first major interpretive stop on-site is likely to be the Pond Interpretive Trail. Thematic Overview will be offered in interpretive exhibits inside the center. All the strategies identified for the short and medium term will still work. However, given that the plant propagation area will not be relocated, it makes sense to keep the Demonstration Gardens and plant sale area where they are currently located. In an effort to reduce vehicles in the Preserve proper, a tram or some other type of transportation strategy will be needed to move visitors to this area, and to move visitors – with plants they have purchased – back to their vehicles.

Departure Experience

Current Departure Experience

Visitors are likely to use the restrooms prior to departing the site and may choose to view what is available in the Nature Store. A changeable information space on the exterior wall of the restrooms provides information on the Mission of the Preserve, and bulletin board with upcoming events and other relevant topics is tucked into a corner and not as apparent as it could be. After accessing their vehicle, visitors continue on the loop road that takes them by the Pond and back to the highway. Some people exit the way they came in, not realizing that the road is one-way.



The front porch should be rearranged by removing the bench, moving the garbage and recycling from in front of that exhibit space, putting the event information on the wall between the restrooms, and upgrading the display case above the bench.

Proposed Future Departure Experience

The Departure Experience is essentially the same, regardless of whether from the existing Visitor Center or a new Visitor Center. The major difference is that in a new Visitor Center, the location for information relevant to a Departure Experience (upcoming events, membership benefits, etc.) can be included in the design in a place where it is easier for a visitor to leave contact information to be appraised of upcoming events and opportunities. An additional 'Do Not Enter' sign is located in the parking area where the access road enters.

Design Concepts

Pre-Visit Experience: Strategies to Help People Plan a Visit

BHWP web site

Note: This site already exists. It is included because it is part of the Information Network necessary to support visitor interpretive experiences, and because it can be modified to work more effectively as a tool to facilitate visitation.

Objectives

Ideally, when people finish interacting with the information on this website, they will:

- Be motivated to visit BHWP;
- Have the information necessary to plan a visit (they should be able to print off a map, the
 Explorer's Guide to BHWP and the Sense-ational Discovery Guide), and download the Explorer's
 App to BHWP;
- Understand that the Pond and lower part of the Preserve is not available during weddings and be able to easily find out the wedding schedule;
- Be aware of upcoming projects in which they could be involved;
- Be aware of upcoming events;
- Be motivated to connect with BHWP through one or more social media platforms;
- Be aware that the web site contains resources regarding the use of native plants in landscaping;
- Be aware that a Friends Group exists and know where to find out more information about the Friends Group.

Description and Concept

This is probably one of the first places a potential visitor would go to gather additional information to determine if a visit is worthwhile, and if so, to plan a visit. However, the current organization, layout and choice of images on the site is not as effective as it could be in supporting visitation. The website should be thought of first as a marketing tool to motivate people to come and a trip planning tool to help facilitate that visit by providing maps and directions. Possible modifications include the following:

- Use images of people recreating at BHWP on the home page.
- Create a 'Visitor Activities' page with images of people engaging in activities, such as viewing birds on the feeders from inside the main room, walking the trails, picnicking, etc.
- Use images of people recreating at all times of the year (possibly changing these on a seasonal basis).
- Use images to illustrate what to bring along with a description.
- Use images to illustrate hazards, along with supporting information, but without scaring people
 off.
- Provide an opportunity for visitors to print off the map, the Sense-ational Discovery Guide and the Explorer's Guide to BHWP.

As additional visitor information strategies, such as the Sense-ational Discovery Guide, Explorer's App for BHWP and Explorer's Guide to BHWP, are developed, they should be made available on this site.

Arrival Experience: Strategies to Meet Visitor Needs

Directional and Site Identification Signage

Locations

See list under Description and Concept

Objectives

After encountering directional and site identification signage visitors will:

• Be able to quickly make a choice as to direction to go with confidence.

Description and Concept

The following table contains a description of a directional or site identification sign and the location of that particular sign.

Sign Description	Location	Purpose
Access Road Directional	At the fork in the road that	The sign indicates direction and distance to
Sign	visitors encounter soon	Visitor Center
	after entering the site.	
Visitor Center Directional	Between the Visitor Center	The sign indicates direction to restrooms,
Signpost	and associated parking	Visitor Center, Tour Staging Area and Plant
	area	Sale area.
Tour Staging Area	At the Tour Staging Area	Identify Tour Staging Area
Identification Sign		
Trailhead Identification	At all trailheads	Identify trail and provide small map of
and Directional Signposts		Preserve with a 'You Are Here'

Site Orientation Panel (Exterior)

Locations

The Pond, the Visitor Center and the Moore Pavilion (see location map on next page).

Objectives

After viewing the panel visitors will:

- Be inspired, informed, and eager to explore the Preserve;
- Know where they are in relation to other locations on the site;
- Know where to go next to continue their experience;
- Be aware of key interpretive/recreational opportunities on-site;
- Feel comfortable in their ability to navigate the Preserve;
- Be aware of the opportunities that are fully accessible.



Location of Site Orientation Panels

Description and Concept

The following are key aspects of the design and placement of the Site Orientation Panel that will increase its effectiveness:

- 1. Limit information to that which helps with its function and avoid putting symbols and information that do not help, especially on the map. Adding unnecessary information clutters the sign and increases the difficulty in getting the desired information, which usually focuses on answering the questions, "Where am I?" "What is there to do here?" and, "How do I get where I want to go?" At a minimum the Site Orientation Panel should contain the following:
 - The current map of the Preserve;
 - Mileages and times for walking the trails;
 - A "You Are Here;" (This means a separate Site Orientation Panel for each location, which
 you would have to do anyway to make sure that all panels were oriented in the
 direction a visitor is facing.);
 - Visuals of key interpretive and recreational opportunities tied to location with information on which are fully accessible;
 - North arrow;
 - Legend scale, such as 1 inch = 100 yards (you might want to have the scale provided in a metric system also since many visitors may be coming from other parts of the world).
- 2. Orient the panel in the direction that the visitor is facing when looking at the sign instead of north. People expect information at the top of a map on a panel to be in front of them. This requires determining location and orientation for panels prior to design and fabrication. It also means that you may have several versions of the Site Orientation Panel.

3. Use the same map on the sign that is used in the map, the various publications and on the website. Viewing the same map on a panel as is used in an associated brochure helps visitors move back and forth between the two.

One possible concept is to use the current map as a backdrop for all the basic orientation information. Arrange images of recreational opportunities around the perimeter of the map, with a graphic element (line) connecting the image to the appropriate location on the map.

Exterior Information Kiosk

Location

Just outside Visitor Center, near main entry.

Objectives

After interacting with the person in the kiosk, visitors will:

- Have had most if not all their orientation and wayfinding questions answered, especially, "What
 is there to do here?"
- Be excited about exploring the Preserve;
- Have all the information they need for their desired experience (including a map);
- Know how to download and use the Application (after it has been developed);
- Have paid their fee;
- Be aware that the Preserve offers programs and stages events (and have a copy of the event and program schedule), and that they can receive information on upcoming events and programs via email if they supply their email address.

Description and Concept

Although the Visitor Center will still have an Information Desk inside, the small lobby can get quite crowded during heavy visitation periods in the summer. The Exterior Information Kiosk would be utilized during those times to provide exactly the same service as the interior Information Desk.

The Information Kiosk provides the opportunity to gather information from and ask questions of the staff. It is a critical part of the experience because some people prefer to get information personally, and because it sends the message that the Preserve thinks serving the public is important enough to dedicate staff to that function. That is becoming more significant as society moves increasingly to non-personal strategies for conveying information to visitors. Information available at the Information Desk includes:

- The Site Map;
- The Explorer's Guide to Bowman's Hill Wildflower Preserve;
- Information on upcoming and regular events and programs;
- All publications associated with the Preserve;
- An optional sign-in book that can be used to market events and programs (if people leave their email addresses).

Information Desk

Location

In lobby of Visitor Center.

Objectives

After interacting with the opportunities in this area visitors will:

- Have had most if not all their orientation and wayfinding questions answered, especially, "What
 is there to do here?"
- Be excited about exploring the Preserve;
- Have all the information they need for their desired experience (including a map);
- Know how to download and use the Application (after it has been developed);
- Have paid their fee;
- Be aware that the Preserve offers programs and stages events (and have a copy of the event and program schedule), and that they can receive information on upcoming events and programs via email if they supply their email address.

Description and Concept

The Information Desk provides the opportunity to gather information from and ask questions of the staff. It is a critical part of the experience because some people prefer to get information personally, and because it sends the message that the Preserve thinks serving the public is important enough to dedicate staff to that function. That is becoming more significant as society moves increasingly to non-personal strategies for conveying information to visitors. Information available at the Information Desk includes:

- Explorer's Guide to Bowman's Hill Wildflower Preserve;
- The Sense-ational Discovery Guide;
- The Site Map;
- Information on upcoming and regular events and programs;
- All publications associated with the Preserve;
- An optional sign-in book that can be used to market events and programs (if people leave their email addresses).

Self-Serve Orientation Area

The Self-Serve Orientation Area allows visitors to get all the orientation and wayfinding information they need without having to go to the Information Desk. Availability of the information eases pressure on the Information Desk when the facility is crowded, and serves visitors who prefer to gather information this way rather than engage in personal contact. Key information needs include answers to basic questions (What is there to do here?), and orientation and wayfinding information facilitating a visit to other parts of the Preserve.

Location

In lobby of Visitor Center.

Objectives

After interacting with the opportunities in this area visitors will:

- Have had most if not all their orientation and wayfinding questions answered, especially, "What
 is there to do here?"
- Be excited about exploring the Preserve;
- Feel comfortable in their ability to find their way around the site;
- Have all the information they need for their desired experience;
- Have paid their fee;
- Are aware that the Preserve offers programs and stages events (and have a copy of the event and program schedule).

Description and Concept

To function effectively, visitors entering the facility must be able to quickly identify the type of information offered at this station. One possibility is to use a large title and visual element, such as the questions "What is there to do here?" accompanied by a collage of people engaging in a variety of activities at the Preserve. All the information available at the Information Desk would be available at this station. It would also contain a fee-payment station.

Primary Experience: Strategies to Enrich the Visitor Experience

Site Map

Objectives

The intent of this strategy is to provide visitors with a simple orientation and wayfinding tool that can be used throughout the Preserve. After finishing using this strategy, visitors will:

Have had an easy time finding their way around the Preserve

Description and Concept

This map already exists and should be used until it is time to reprint. At that time the following changes should be considered:

- Put a symbol for a barrier across the road through the Preserve so visitors do not get the
 impression they can drive to Bowman's Hill Tower on the road through the Preserve (it currently
 looks as if that is possible).
- Add mileage / time required for each trail.
- Add difficulty level for each trail.

Explorer's Guide to Bowman's Hill Wildflower Preserve

Note: This strategy will be used off-site even if it is not distributed off-site because visitors may share the publication with others when telling them about the Preserve. For that reason, it needs to have directions to the Preserve as well as on-site wayfinding information.

Objectives

After interacting with this opportunity visitors will:

- Have had most if not all their orientation and wayfinding questions answered, especially, "What
 is there to do here?"
- Be excited about exploring the Preserve;
- Feel comfortable in their ability to find their way around the site;
- Have all the information they need for planning and having their desired experience;
- Are aware that the Preserve offers programs and stages events, and that they can get a schedule in the visitor center or sign up to get notices on-line;
- Be able to easily navigate the Preserve;
- Understand all the key messages.

Themes

All themes should be communicated in this publication.

Description and Concept

This is a comprehensive publication that contains orientation and wayfinding information to the Preserve, information on each trail (length, difficulty, time required, highlights, etc.), interpretive information, contact information, etc. Content will include the information currently found in the array of publications available at the Preserve.

One possible approach is to organize the information based on the trail / route the visitor is following. In such an approach, the information would include a thematic overview for the specific trail along with key stops along the route that reinforce the key themes communicated along the route (which ties to the visible features on that specific trail).

Explorer's Application (App) to Bowman's Hill Wildflower Preserve

Objectives

Since this is a digital version of the Explorer's Guide to BHWP, the objectives will be the same.

Themes

All themes should be covered.

Description and Concept

This is essentially a digital version of the Explorer's Guide, but with additional features afforded by digital technology, such as augmented reality, vodcasts and podcasts. Applications can be designed in any number of ways, but the key is to make sure that the visitor can access information quickly that is

relevant to their particular location and experience. The other key aspect for this application is that visitors can download the information so they do not have to depend on Wi-Fi access when on the Preserve.

Ideally, visitors will be able to use the App to access detailed information as follow up to any topic or concept introduced on interpretive signs or other interpretive opportunities. In addition, it will have podcasts for specific trails, like chapters in a book.

Note: Although Apps cost a significant amount of money to develop due to the work required to create the data base, they are currently a strategy that appeals to Millennials, an important audience.

Sense-ational Discovery Guide

Objectives

The intent of this guide is to motivate visitors to:

- Experience key features of the Preserve using all their senses;
- Learn all the key messages.

Themes

All major themes could be covered in this publication, but the emphasis would be on the following:

Interpretive Theme 2: Plants, and all other biological organisms, depend on their specific habitats to flourish.

Sub-theme 2-1: Native plants depend on specific habitats to flourish.

Sub-theme 2-4: Native birds, fish and wildlife depend on their specific habitat to survive. Native plants are a key part of those habitats. Put another way, a symbiotic relationship exists between flora and fauna.

Interpretive Theme 4: Everything in an ecosystem is linked. Eliminating one element has a ripple effect throughout the ecosystem.

Description and Concept

This publication focuses on helping visitors connect with natural and the cultural history of the Preserve by making them 'Detectives of the Landscape.' Clues addressing all senses help visitors discover evidence of the past, of the forces that shaped and continue to shape BHWP and of the flora and fauna that live here.





The Sense-ational Discovery Guide would help people identify woodpeckers by the holes they make.

The actual device can be anything easily carried and used as an identification guide and check-off list, such as a small booklet or set of cards with pictures on a ring. Whatever is used, it should contain descriptions and images of features to look for and check off. Each item has two columns to check — one for experiencing the feature in an exhibit or learning about it on a sign, and one for experiencing the actual feature. For example, if the user learned about woodpecker holes in the visitor center and then found one while exploring the Preserve, he or she could put a mark in each column. Experiences should involve all senses, such as smelling bark, hearing a bird call, identifying a tree by the feel of the bark, etc.

Two versions of this strategy could be developed. The simpler one would be available free of charge. A more detailed version, perhaps with information on where to find different items on the list, could be an item for sale in the Bookstore.

Thematic Overview Exhibits

Location

Within the main room in the Visitor Center along the wall opposite the windows.

Objectives

After engaging with this interpretive opportunity, visitors will:

- Understand all the major themes;
- Be motivated to contribute to the Preserve and/or conservation of natural resources;
- Feel a positive emotional connection to the Preserve and to native plants;
- Feel empowered that he/she can make a positive contribution;
- Make at least one lifestyle change that benefits the conservation / restoration of native flora.

Themes

All themes would be included

Description and Concept

One possible approach is to create the following exhibits, each with multiple parts. Between them they can cover all the major themes and sub-themes.

Working Title: Plants in Your Life

Ideally this would be an interactive exhibit that allows people to experiment with removing plants from a food web and putting them back to see the impact. The impact of removing plants would be primarily depicted in visuals with supporting text. For example, as plants were removed, the number of species of other biological organisms at all trophic levels should be reduced as should be the populations of remaining organisms. This would help reinforce the concept that life on earth depends on plants. Removing some of the plants should result in a severe decline in pollinators with corresponding impacts on available food depicted. This should reinforce the concept that our quality of life depends on native plants. The summary of the exhibit would make it clear that all biological organisms, including plants, depend on habitat, and for many organisms, plants are part of their necessary habitat. Because people can also experiment with putting plants back, the concept of managing habitat in order to conserve/restore biological organisms can be brought out.

Note: Although this exhibit focuses on the importance of plants, but does not necessarily emphasize the importance of native plants.

Working Title: The issue with invasives

Note that this could be a part of the previous exhibit, but if an exhibit has too many components, key messages could be lost.

As with the previous exhibit, this one might work well as an interactive. The background could be a map of the area showing concentrations of native fauna, with the Preserve having a higher concentration because of a higher concentration of native flora. If other areas have an abundance of native flora, they should also show a higher concentration of native fauna. The backdrop can be altered by increasing or decreasing specific invasives, which should result in a reduction in populations of specific species of fauna and possibly the eliminating of some species. The plants taken away and added should reflect species that the Preserve currently deals with, either as invasives they are trying to eliminate or native plants they are trying to encourage. The summary of the exhibit should summarize negative impacts of invasives in terms of impact on the quality of life of people and also the positive impacts. The Call to Action should encourage people to plant native plants to support native fauna and to landscape with native plants.

Native Habitat for Native Birds and Wildlife Identification and Interpretive Panels

Location

Within the main room in the Visitor Center, along the window wall.

Objectives

After engaging with this interpretive opportunity, visitors will:

- Understand all the major themes;
- Be motivated to contribute in some way to the Preserve and/or conservation of natural resources;
- Feel a positive emotional connection to the Preserve and to native plants;
- Feel empowered that he/she can make a positive contribution.

Key Themes

Interpretive Theme 2: Plants, and all other biological organisms, depend on their specific habitats to flourish.

Sub-theme 2-1: Native plants depend on specific habitats to flourish.

Sub-theme2-2: An unhealthy environmental imbalance occurs when any native plant, animal or other organism declines or disappears.

Sub-theme 2-3: Protecting native flora and fauna focuses on protecting and restoring the habitat they depend on.

Sub-theme 2-4: Native birds, fish and wildlife depend on their specific habitat to survive. Native plants are a key part of those habitats. Put another way, a symbiotic relationship exists between flora and fauna.

Interpretive Theme 3: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.

Sub-theme 3-4: Because individual actions add up incrementally to significant impacts, you can play an important role in conserving local native plants and protecting the local environment.

Sub-theme 3-5: Bowman's Hill Wildflower Preserve is working to conserve and restore native plants and habitat. This effort helps to conserve the native birds and wildlife we value for today and for future generations.

Description and Concept

These panels help visitors identify the birds and wildlife they might see through the windows, and explain why the native habitat at the Preserve is vital to native birds and wildlife. They also contain an invitation for visitors to invite native birds to their homes by planting native plants.

Guided and Self-Guided tours

Objectives

The objectives depend on the actual tour, but in all cases, after engaging in this interpretive opportunity, visitors will:

- Be motivated to explore other parts of the Preserve on their own (if on a Guided Tour);
- Be motivated to contribute in some way to the Preserve and/or conservation of natural resources;
- Feel a positive emotional connection to the Preserve;
- Feel empowered that he/she can make a positive contribution.

Themes

Themes to be covered would depend on the specific focus of the tour, but since tours in general tend to pass through multiple habitats, the following themes should apply to any tour.

Interpretive Theme 2: Plants, and all other biological organisms, depend on their specific habitats to flourish.

Sub-theme 2-1: Native plants depend on specific habitats to flourish.

Sub-theme2-2: An unhealthy environmental imbalance occurs when any native plant, animal or other organism declines or disappears.

Sub-theme 2-3: Protecting native flora and fauna focuses on protecting and restoring the habitat they depend on.

Sub-theme 2-4: Native birds, fish and wildlife depend on their specific habitat to survive. Native plants are a key part of those habitats.

Interpretive Theme 3: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.

Sub-theme 3-3: Your actions have impact on the immediate and surrounding environment. You can make a difference by supporting the Preserve, creating your own habitat garden, learning more, volunteering, etc.

Sub-theme 3-4: Because individual actions add up incrementally to significant impacts, you can play an important role in conserving local native plants and protecting the local environment.

Sub-theme 3-5: Bowman's Hill Wildflower Preserve is working to conserve and restore native plants and habitat. This effort helps to conserve the native birds and wildlife we value for today and for future generations.

Interpretive Theme 4: Everything in an ecosystem is linked. Eliminating one element has a ripple effect throughout the ecosystem.

Description and Concept

This depends entirely on the tour.

What's in Bloom

Objectives

After engaging in this interpretive opportunity, visitors will:

- Be motivated to visit the areas of the Preserve with to see at least some of the highlighted plants in bloom;
- Be more motivated to plant native plants because of their flowers.

Description and Concept

This is not interpretive, but rather an easily changeable tool to motivate visitors to include viewing these wildflowers as part of their visit. Ideally, an image of the plant would be used along with the name and location. One possible approach is to use a magnetic board with the map of the Preserve as a backdrop for individual magnets depicting blooming flowers. The magnets can then be moved to where they have been seen and removed when the plant has stopped blooming. Note that this may work well indoors but not outdoors because it would be easily manipulated by others to render it inaccurate.

Sightings of Birds and Wildlife

Objectives

After engaging in this interpretive opportunity, visitors will:

- Be motivated to visit parts of the Preserve to try to see the wildlife;
- Be more aware of the connection between native flora and native fauna;
- Feel inspired to plant native plants that would attract specific birds and wildlife.

Description and Concept

This is not interpretive, but rather an easily changeable tool to make visitors aware of the birds and wildlife they might be able to see. Of particular importance are native fauna that use the native plant of the Preserve as habitat. Ideally, an image of the species of bird or wildlife would be used along with the name and location. One possible approach is to use a map of the Preserve as a backdrop for enlarged images of specific types of habitat with typical birds that use such habitat. A magnetic board with the map of the Preserve as a backdrop for individual magnets depicting birds. The magnets can then be moved to where they have been seen and removed when the plant has stopped blooming. Note that this may work well indoors but not outdoors because it would be easily manipulated by others to render it inaccurate. At the same time, visitors will always be able to see what kind of birds and wildlife use what kinds of native flora as part of their habitat.

Penn's Woods Interpretive Trail

Objectives

After engaging in this interpretive opportunity, visitors will:

- Be motivated to explore more of the Preserve on their own and/or take a Guided Tour;
- Be aware that BHWP is working to restore native flora;

- Be motivated to contribute in some way to the Preserve and/or conservation of natural resources;
- Feel a positive emotional connection to the Preserve;
- Feel empowered that he/she can make a positive contribution;
- Understand the issues with invasives.

Key Themes

Interpretive Theme 2: Plants, and all other biological organisms, depend on their specific habitats to flourish.

Sub-theme 2-1: Native plants depend on specific habitats to flourish.

Sub-theme2-2: An unhealthy environmental imbalance occurs when any native plant, animal or other organism declines or disappears.

Sub-theme 2-3: Protecting native flora and fauna focuses on protecting and restoring the habitat they depend on.

Sub-theme 2-4: Native birds, fish and wildlife depend on their specific habitat to survive. Native plants are a key part of those habitats.

Interpretive Theme 3: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.

Sub-theme 3-5: Bowman's Hill Wildflower Preserve is working to conserve and restore native plants and habitat. This effort helps to conserve the native birds and wildlife we value for today and for future generations.

Interpretive Theme 4: Everything in an ecosystem is linked. Eliminating one element has a ripple effect throughout the ecosystem.

Description and Concept

Note that a number of other changes will occur within this trail. These include removing the sign that includes 'Be a Conservationist,' upgrading the trail so that it meets universal access standards, putting a pathway of steppingstones across the moss garden and adding a trailhead sign at both ends. At this point, the following Interpretive Stations have been identified for interpretive panels. Slightly larger areas will be cleared and hardened so tour participants can group around the tour leader without standing in the resource. In addition, a raised flat stone could be located for the tour leader to stand on when given a tour. Additional interpretive information can be obtained in the Explorer's App to BHWP, the Explorer's Guide to BHWP and the Sense-ational Discovery Guide.

Trailhead Signs (both ends of the trail)

This identifies the trail, has a small inset map showing location in the Preserve and a brief overview. The overview should highlight Penn's Woods as an early conservation effort. It should also have a directional sign noting that the Gazebo and Pond can be reached on this trail. The Trailhead Sign on the other end should indicate that the Visitor Center and Gazebo can be reached from that end.

Interpretive Station 1: Succession and the resulting impact on flora and fauna

Note that the point of this stop is not to teach people about succession as the focal point, but rather to use the stop to talk about a natural phenomenon in nature and the impact it has on the array of fauna that use a particular area to reinforce the connection between habitat and biological organisms.

Interpretive Station 2: Everything plays a part

This is the stop in the moss garden. As with the previous stop, the point is not to talk just about moss as decomposers, but to reinforce the idea that ecosystems and the habitats they contain are made up of an incredible array of organisms and elements that are all interconnected. Removing one of those elements has a ripple effect through the environment.



A path of steppingstones will allow visitors to walk into the moss garden and reach the trail on the other side.

Interpretive Station 3: Fungi and snags.

In a sense, this is similar to the stop on succession since it focuses on the dynamic aspect of ecosystems, and since the focus is not on fungi as decomposers or on snags specifically (although those are the vehicles being used to tell the story) but rather on how different stages of succession work as key parts of habitat for different species of biological organisms.



The Sense-ational Discovery Guide could help people identify some of the colorful decomposers in the Preserve.

Interpretive Station 4: Changing forest changing lifeforms

This stop uses the large leaves of magnolias to focus on another successional species whose habitat involves conditions found at that particular successional stage. It will also be used to focus on species of fauna that need or use the Magnolia as part of their habitat.

Interpretive Station 5: The issue with invasives

This stop builds on the previous stops by showing the negative impacts of invasives in terms of native flora that are displaced and the consequent impact on native fauna. It should also include what BHWP is doing to eliminate invasives. With that in mind, this sign needs to be located so it is facing an area that BHWP is working on to eliminate the invasives, like Japanese Honeysuckle.

Interpretive Station 6: Anchor Species

This stop uses the white oak to focus on native plant species within an ecosystem that have a significant impact on the structure and composition of that ecosystem. The panel should show what the forest community would look like without this species.

Pond Interpretive Trail

Location

Around the Pond on the Interpretive Trail. Note that all signs should be accessible without visitors having to get off the trail.

Objectives

After engaging in this interpretive opportunity, visitors will:

- Be motivated to explore more of the Preserve on their own and/or take a Guided Tour;
- Be motivated to contribute in some way to the Preserve and/or conservation of natural resources:
- Feel a positive emotional connection to the Preserve;
- Have increased appreciation for the role of wetlands and riparian vegetation in cleaning water.
- Feel empowered that he/she can make a positive contribution.

Themes

As with the Penn's Woods Interpretive Trail, the Pond Trail can focus more on Thematic Overview because it is likely to be at or near the beginning of a visitor experience. Therefore, it should convey most if not all the themes. Since the trail does pass by a number of different habitats, with different corresponding flora and fauna, it can concentrate more on the following themes:

Interpretive Theme 2: Plants, and all other biological organisms, depend on their specific habitats to flourish.

Sub-theme 2-1: Native plants depend on specific habitats to flourish.

Sub-theme2-2: An unhealthy environmental imbalance occurs when any native plant, animal or other organism declines or disappears.

Sub-theme 2-3: Protecting native flora and fauna focuses on protecting and restoring the habitat they depend on.

Sub-theme 2-4: Native birds, fish and wildlife depend on their specific habitat to survive. Native plants are a key part of those habitats.

Interpretive Theme 4: Everything in an ecosystem is linked. Eliminating one element has a ripple effect throughout the ecosystem.

Description and Concept

As with the Penn's Woods Interpretive Trail the basic information will be delivered with interpretive signs. Additional interpretive information can be obtained in the Explorer's App to BHWP, the Explorer's Guide to BHWP and the Sense-ational Discovery Guide. At this point, the following stops have been identified for potential inclusion for interpretive panels.



Consider not using blue for the signs or concealing them in some way to avoid visual intrusion on the view.

Interpretive Station 1: Pond Trail Overview Panel

This panel is located near the existing donor sign. It includes a small map showing the trail with an inset map showing the location within the Preserve. Information includes length, time and the fact that it is Universally Accessible.

Interpretive Station 2: Pond Habitat Thematic Overview

This provides an overview of the stories told by the associated interpretive panels, with emphasis on the fact that visitors are in a different habitat than Penn's Woods and most other places in the Preserve, so they can expect different flora and fauna. The panel also focuses on the importance of water as an element in the landscape. This is the sign where **Sub-theme 1-4:** Native plants play an important role in a healthy environment, may be applicable because of the role of plants in helping maintain clean water. The last part should be a directive asking visitors to note how many signs of life they see.

Interpretive Station 3: Aquatic Web of Life

The focus is on the aquatic life and how the native aquatic plants support the native fauna. The 'web' should extend outside the pond to the extent that it is clear that the aquatic and terrestrial environments are connected.

Interpretive Station 4: Riparian Area

The focus on this panel are the roles that riparian areas play in providing habitat and keeping water clean through filtering. It helps support the concept of elements in an ecosystem being linked. If you lose riparian vegetation you not only lose the habitat but you end up with water that is not as clean.

Interpretive Station 5: Deer Fence

This should be located where the visitor can look up from the sign and see the fence. The focus is on the purpose of the fence with emphasis on the fact that the problems occur because of what we have done to the deer's natural habitat to create an imbalance in the system.

Demonstration Garden Panels

Objectives

After engaging in this interpretive opportunity, visitors will:

- Be motivated to plant a Specialty Garden;
- Feel empowered that he/she can make a positive contribution;
- Be motivated to encourage their friends to plant a Specialty Garden;
- Be aware that they can get instructions and plants from the Preserve to plant the Specialty Garden of their choice.

Key Themes

Interpretive Theme 1: Native plants are important to your quality of life.

Sub-theme 1-2: Pollinators depend on native plants to survive and are critical for pollinating local crops.

Interpretive Theme 3: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.

Sub-theme 3-2: Our choices can determine what organisms thrive or perish in the environment. **Sub-theme 3-3:** Your actions have impact on the immediate and surrounding environment. You can make a difference by supporting the Preserve, creating your own habitat garden, learning more, volunteering, etc.

Sub-theme 3-4: Because individual actions add up incrementally to significant impacts, you can play an important role in conserving local native plants and protecting the local environment.

Description and Concept

The point of these panels is to highlight gardens that a visitor can plant and that will contribute toward restoring native flora and fauna. The actual panels depend on the array of gardens planted. Since those can change, it is important that the panels can be easily changed. Regardless of the panel, they should all follow a general template with an image that depicts the finished garden and identifies the plants in the garden, and lists the fauna that are attracted. Many of the species of flora and fauna depicted will have associated text (brief) that contains a 'didjaknow' reflecting the value of that species as the visitor may define value. For example, for pollinators the text should focus on the foods that we get because of that pollinator.

Native Vines Interpretive Panel

Objectives

After engaging in this interpretive opportunity, visitors will:

- Be aware that native vines can be a tool in landscaping their own yards;
- Be more inclined to use native vines in landscaping.

Key Themes

Interpretive Theme 3: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.

Sub-theme 3-2: Our choices can determine what organisms thrive or perish in the environment. **Sub-theme 3-3:** Your actions have impact on the immediate and surrounding environment. You can make a difference by supporting the Preserve, creating your own habitat garden, learning more, volunteering, etc.

Sub-theme 3-4: Because individual actions add up incrementally to significant impacts, you can play an important role in conserving local native plants and protecting the local environment.

Description and Concept

This panel focuses on the use of vines in landscaping, primarily as plants to soften human built structures, such as brick walls. The information also includes what native fauna they support. One possible approach is to highlight some of the more common vines and show images of them being used in landscaping so people get a sense of how they might look in such a context. Associated information would highlight the benefits of using vines, including what native fauna they support.

Natural Landscapes Idea Book

Objectives

After engaging in this interpretive opportunity, visitors will:

- Be motivated to use native plants in landscaping at least part of their yards;
- Feel empowered that he/she can make a positive contribution.

Description and Concept

A book of laminated pages on a stand, similar to the 'Native Plant Idea Garden' book, will provide visuals of different landscapes created from native plants. The information includes visuals of particular landscapes in all seasons, plus interpretive information on the value of such landscapes, such as resistance to drought, color, attractiveness, etc.

Conservation Thematic Overview Panels

Location

At a point southeast of the historic Ranger's Station that is removed enough so visitors reading the sign can see the whole structure and ideally the bridge / stream in the distance.

Objectives

After engaging in this interpretive opportunity, visitors will:

- Be inspired to engage in conservation efforts beyond just their own residence;
- Be inspired to engage in conservation efforts at their residence;
- Be motivated to contribute in some way to the Preserve;
- Feel empowered that he/she can make a positive contribution.

Themes

Interpretive Theme 3: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.

Sub-theme 3-1: Because you are linked to the environment, you are affected by impacts to it.

Sub-theme 3-2: Our choices can determine what organisms thrive or perish in the environment.

Sub-theme 3-3: Your actions have impact on the immediate and surrounding environment. You can make a difference by supporting the Preserve, creating your own habitat garden, learning more, volunteering, etc.

Sub-theme 3-4: Because individual actions add up incrementally to significant impacts, you can play an important role in conserving local native plants and protecting the local environment.

Sub-theme 3-5: Bowman's Hill Wildflower Preserve is working to conserve and restore native plants and habitat. This effort helps to conserve the native birds and wildlife we value for today and for future generations.

Description and Concept

The purpose of the panels is to provide interpretation to key cultural features, notably the old ranger office, but in such a way that it motivates people to help with conservation of natural resources. One possible approach is to use the following cluster of interpretive panels.

Panel 1: The beginning

This panel uses a cutaway of the ranger station when it was in use and/or a historic photo depicting the structure when it was in use to reflect the time period. Associated information focuses on how and why the Preserve was established. Key concepts that should come across include the fact that humans had already eliminated a lot of native habitat, and with it, native flora and fauna (with resulting impacts to quality of life), and that it was people (like the visitor) who made the Preserve happen and flourish. The story of Penn's Woods can be included if it happened during that time period. If it is used, an image of the woods – particularly a before and after combination – should be included. This should be oriented towards the structure.

Panel 2: A Little Help from Our Friends

This panel focuses on the impact of the work of the WPA and CCC in regards to conservation of natural resources, along with the concept that people back then already believed that time spent recreating in nature was important to health and hence, quality of life. (Consider that the CCC built the Recreation Development Areas (RDAs) to help motivate people to get out into nature. Information on the impact of the CCC should begin with what people can see in the Preserve and then what other features in the Delaware Valley they can see that were built by CCC or WPA units, especially those that contributed to recreating outdoors in the natural environment. This sign should be oriented toward the bridge.

Panel 3: Where are we Today?

This panel focuses on more recent local efforts to conserve of native flora and fauna, with emphasis on what the Preserve has done, but ideally highlighting individuals. The latter is important because the desire is for people to feel empowered to contribute to positive change. One possible approach is to choose 3 or 4 significant actions that involved individuals making a difference and use before and after images to show the impact. For example, someone could have planted a pollinator garden; another might have landscaped using native plants; and another could have focused on teaching environmental education to children and having them engage in a conservation project. Another possible addition to this panel is a sequence of maps showing the loss of native habitat over time to reinforce the need for action to conserve what is left and to restore some of what has been lost.

Natural Landscapes Information Packets

Objectives

The purpose of this strategy is to make it easier for visitors to actually landscape parts of their yards using native plants. With that in mind, after engaging in this interpretive opportunity, visitors will:

- Use native plants in landscaping;
- Have an image of a landscape planted with the particular array of plants they are using;
- Have directions on what plants to buy, how to space the plants, when to plant them, etc.

Key Themes

The purpose of the packet is to provide information to help the visitor use native plants in landscaping. Thus it is not necessarily a strategy for communicating themes. That said, supporting information (which should be brief) could reinforce the importance of using native plants, in which case it could reflect almost any of the themes. However, the key themes are the following:

Interpretive Theme 3: Because we are all integrally tied to the environment, it is up to all of us to conserve, protect and restore the natural environment.

Sub-theme 3-1: Because you are linked to the environment, you are affected by impacts to it.

Sub-theme 3-2: Our choices can determine what organisms thrive or perish in the environment.

Sub-theme 3-3: Your actions have impact on the immediate and surrounding environment. You can make a difference by supporting the Preserve, creating your own habitat garden, learning more, volunteering, etc.

Sub-theme 3-4: Because individual actions add up incrementally to significant impacts, you can play an important role in conserving local native plants and protecting the local environment.

Interpretive Theme 4: Everything in an ecosystem is linked. Eliminating one element has a ripple effect throughout the ecosystem.

Description and Concept

This is simply a set of directions on how to develop natural landscapes. This strategy is meant to be used in conjunction with the Natural Landscapes Idea Book. As with the Demonstration Garden Kits, these include a list of plants to use to create certain effects or specific types of natural landscapes, a map depicting arrangements of specific plants, and information on planting and care of the plants. They should include a picture of the mature landscape that can be created using that particular packet. (This is for small areas of landscaping, not complete yards.)

Trailhead Orientation and Thematic Overview Panels

Objectives

After engaging in this interpretive opportunity, visitors will:

- Feel comfortable knowing where they are in relation to other features in the Preserve;
- Feel comfortable knowing what they are getting into by taking a particular trail (difficulty, time required, distance, features);
- Be motivated to walk that particular trail.

Themes

Themes to be covered would depend on the features on a specific trail and the associated stories that could be told using those features.

Description and Concept

Each trailhead would at least have a small map of the Preserve with a 'You are Here' so visitors could orient themselves. Trail difficulty, distance and time required would also be included. Most would also include thematic overview information alerting visitors what to look for along each trail and what those features mean.

Sign Plan

The following information focuses only on orientation, wayfinding and interpretive signage, including existing and proposed signs. Note that it does call for removing existing interpretive signage, but only when it is ready to be replaced by signage that better reflects the messaging established for the Preserve, and clearly belongs to a family of signs for the site.

	Orientation ar	nd Wayfinding signage	
Sign	Location	Description	Priority
Turn-off alert sign	On highway about ¼ from the access road coming from both directions	This is a simple sign alerting travelers that the turn to BHWP is coming up quickly. Note that the decision to put in this sign and the design are controlled by Pennsylvania DOT.	
Access Road Directional Sign	Access Road	Directions and distance to Visitor Center	High
Visitor Center Directional Signpost	Path between parking lot and Visitor Center	Directions to restrooms, Visitor Center, Penn's Woods Interpretive trail and plant sale area	High
Trailhead Identification and Directional Signposts	All trailheads and major areas	Small map with a 'You are Here.' Map matches one used in publications.	High
Site Orientation Panels	Visitor Center, Pond, Moore Pavilion	Orientation Map for entire site	High
	New Identification	n and Interpretive Panels	
Demonstration Garden Interpretive Panels	Demonstration Gardens	Thematic Overview and information on specific Demonstration Gardens. Need to be designed as a family of panels that reflect the key messages.	High
Penn's Woods Interpretive Trail Panels	Along the Penn's Woods Trail	Interpretive panels telling the story of conservation and providing an introduction to the key messages. This is a high priority because of the heavy use this trail gets.	High
Pond Interpretive Trail Panels	Pond	Thematic overview of messages associated with the story of the Pond. Also a high priority because of the heavy use in this area.	High
Conservation Thematic Overview Panels	Ranger Station	Panels providing overview of key messages / stories applicable to this feature.	Medium
Plant Sale Area Identification Sign	At the entry to the Plant Sale area from the pathway		

Connecting it to the front of the Visitor Center and from the Parking Area Natural Landscapes Idea Book Trailhead Thematic Overview Panels Signs to be moved or removed Site map Near Moore Pavilion, perpendicular to road Nature's Garden Existing Demonstration Garden panels Plant Sale area Ideas for how to use native plants to Ideas for how to use native plants t
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Demonstration Gardens with new ones Garden panels
Garden panels
Existing interpretive Pond Remove only when ready to replace them
signage at the Pond with new ones
Existing signage at Bird viewing These are not slated to be replaced
the bird viewing platform because this is not a particularly good bird
platform watching location.
Native Plant Idea In front of the This should perhaps be moved first to the
book Visitor Center plant sale area, and then replaced with
the Natural Landscapes Idea Book.
Preserving the To the right of the The current location encourages people to
Preserve Interpretive access road as you stand to close to the road.
Sign approach the gate
Wildflower Preserve To the right of the Consider moving this sign, perhaps
Welcome access road almost somewhere close to the Visitor Center
Information Sign at the gate where people are beginning their
experience. It could also be at the Moore
Pavilion to let those users know where
they are and to market the rest of the
Preserve. In its current location, it is
unlikely that visitors will be able to read it
while driving and unlikely that they will
stop in a vehicle to read it.
Sign with 'Be a Near beginning of
Conservationist' Penn's Woods Trail

Action Plan

Introduction

The following set of recommended actions is based on the following set of general guidelines:

- 1. Actions that improve the visitor experience significantly without significant cost are a high priority.
- 2. Orientation and wayfinding information is a higher priority than interpretive information.
- 3. Interpretive Thematic Overview is a higher priority than interpretive detail.
- 4. Interpretive information closer to the Visitor Center is a higher priority because it can potentially reach more people.
- 5. Lower cost strategies are typically a higher priority because they provide a big bang for the buck and often increase momentum and interest.
- 6. Strategies that are more likely to result in visitors planting native plants are a high priority because that is a key goal.

Please note that this does not include all of the actions related to infrastructure modification that should happen during this time period; only the ones that have significant impact on the Visitor Experience.

Anytime Feasible

The following strategies should be implemented based on when existing strategies wear out and need to be replaced.

- 1. Remove the panels at the birding platform.
- 2. Replace the existing Trailhead Identification Signs with the recommended Trailhead strategies as the existing signs wear out.
- 3. Remodel the Lobby/Bookstore area.

Phase 1

The focus for Phase 1 is to essentially improve the appearance of the Preserve and implement strategies that can be accomplished relatively quickly, with minimal cost, and that provide significant return in term of upgrades to the visitor experiences at the Preserve.

- 1. Eliminate the library from its current location.
- 2. Clean up the front porch of the Visitor Center.
- 3. Design and produce the Access Road Directional Sign.
- 4. Remove the signs before the entry gate that are not particularly effective, including the orientation sign parallel to the access road near the Pavilion (and remove the kiosk), the 'Preserve the Preserve' interpretive panel near the entry gate, and the information on the Preserve panel also near the entry gate.
- 5. Create the **Natural Landscapes Information Packets** and **Specialty Garden Kits** to be sold in the Nature Store.
- 6. Create the laminated **Natural Landscapes Idea Book,** and remove the **Native Plant Idea Garden** interpretive booklet.
- 7. Design and build the **Welcome Kiosk** for the front of the Visitor Center.

- Install the Visitor Center Directional Signpost along the access path between the parking area and Visitor Center.
- 9. Modify the website to include information on when the Pavilion and Pond are likely to be closed to public use due to special events.
- 10. Begin reducing the number of weddings with the goal of making the site available once a month for such events.
- 11. Remove the large, interpretive signs in the Plant Sale Area.
- 12. Design and install an entry structure and sign to the Plant Sale Area to draw attention to it and differentiate it from the surrounding areas.
- 13. Create a clear demarcation between the trailheads at the back of the Plant Sale Area and the Plant Sale area, and improve the landscaping around the trailheads to make them enticing.
- 14. Install a stepping-stone walkway connecting the bench in the Moss Garden to the trail between the Visitor Center and the Pond.
- 15. Begin work on redesigning the parking area to Increase the safety by establishing visitor walkways around the perimeter, crosswalks and staging areas.
- 16. Develop a **Resource Book** for staff and volunteers that contains answers to common questions and other relevant information.
- 17. Install a composting toilet in the more remote part of the Preserve.
- 18. Eliminate the identification of the Penn's Woods Interpretive Trail as a Universal Access Trail until it is made universally accessible.
- 19. Upgrade the Penn's Woods Interpretive Trail so it is universally accessible.
- 20. Upgrade the trail around the Pond so it is universally accessible.
- 21. Create the tour Staging Area across from the Visitor Center.
- 22. Ensure that the 'Exit' sign from the parking area is not obscured by plants in the Sales Area.
- 23. Begin work to plan how to keep the Plant Sales Area from encroaching on parking.

Phase 2

The focus of Phase 2 is to implement strategies that have longer lead time necessary for planning and/or obtaining funding that again have a good return in terms of upgrading the interpretive experience. In terms of interpretive experiences the focus is on ones that are near the existing areas of visitor concentration.

- 1. Increase the safety in the parking area by establishing visitor walkways around the perimeter, crosswalks and staging areas.
- 2. Provide Tour Guide training and rework guided tours to reflect messaging.
- 3. Eliminate parking on the roadway.
- 4. Construct a gatehouse to be staffed during periods of heavy use.
- 5. Design and print the Explorer's Guide to Bowman's Hill Wildflower Preserve.
- 6. Design and print the Sense-ational Discovery Guide.
- 7. Develop the Penn's Woods Interpretive Trail interpretive signage.
- 8. Develop the Pond Interpretive Loop Trail interpretive signage.
- 9. Develop the Trailhead Thematic Overview Panels and Trailhead Identification and Directional Signposts for the primary trails used by visitors.

Phase 3

Before embarking on developing additional strategies, the plan should be reviewed in terms of what worked and what did not, what changes have occurred in audiences and parameters, especially in regards to information-delivery techniques (new technology).

- 1. Obtain a tram/shuttle.
- 2. Develop the Explorer's App to BHWP.

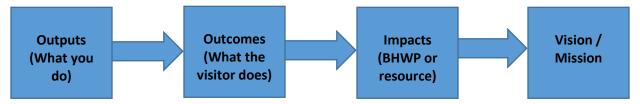
Appendix A: Goal Hierarchy Information

Introduction

The information in this section includes the logic model used to develop the goal hierarchy and all the mission and management goal information from which the Interpretive Program Goals were derived.

Logic Model

We are using a basic logic model (pictured below) in this planning process to derive recommendations for Visitor Interpretive Experiences. Our ultimate goal for the planning process is to determine the outputs – what you do. They are based ultimately on the mission of BHWP, your vision (positioning / goals) for the future, what needs to happen in terms of impacts on the Preserve to make that vision a reality, and what behaviors by visitors are necessary to create the desired impacts.



Identifying each of these components is determined working from the top down. In other words, we will use the Mission / Vision (Positioning) for BHWP in the future to determine the impacts to BHWP or the resources that need to happen to achieve that vision, what visitors need to do to help achieve the desired impacts, and finally, what you are going to do – in terms of developing Visitor Interpretive Experiences – to motivate people to engage in the behaviors you desire. One purpose in using this model is to ensure that the Interpretive Program and all the Visitor Interpretive Opportunities developed for that program make progress towards achieving the overall mission of BHWP.

Structure of Goal Hierarchy

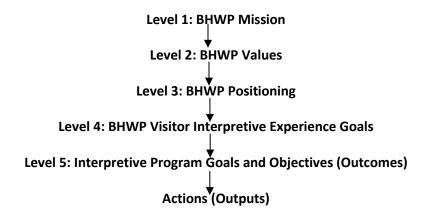
The following is the structure of the goal hierarchy that guides selection and design of visitor interpretive experiences that are consistent with and support the mission and goals of BHWP, and the information network to support those experiences. Draft versions of goal statements at each level are included, with the exception of 'Actions,' which will be identified at the end of this planning process. In fine-tuning the missions, visions, goals and objectives in the hierarchy, it is important not to lose focus on the hierarchy as a whole, nor on its purpose, which is to derive the visitor interpretive goals and objectives. In short, the purpose of the presenting a goal hierarchy in this plan is to clearly show the link between the mission of BHWP and the recommended actions associated with developing a network of interpretive opportunities to help create visitor interpretive experiences.

The final version of the hierarchy reflects the following key attributes:

- 1. Everything should stem from the BHWP mission.
- 2. The statements at each level, whether goals, missions or vision, are derived from the statements of the level above. Determining each set of statements requires asking the question, "how can this [goal, outcome, mission] help achieve the next level up?" For example, the specific Visitor Interpretive Experience Goals for BHWP can be determined by asking, "How can a Visitor

Interpretive Experiences and the associated Interpretive Program help achieve the BHWP Positioning Statements?"

In summary, the VIEP takes its direction (Visitor Interpretive Experience Goals) from the Positioning / Strategic Goals / Management Goals for BHWP, which reflect the Vision/Mission for the site and the Values championed by the Friends Group. In the case of BHWP, the 'Management Goals' appear to be synonymous with what is termed 'Positioning.' The Visitor Experience Outcomes reflect impacts on the behavior, knowledge and attitude of the target audiences, which, if achieved, result in progress toward the Visitor Interpretive Experience Goals. The media prescription are the Outputs by BHWP that are the tools for achieving the desired impacts on target audiences. All those elements have been captured in the hierarchical structure below.



BHWP: Mission, Values and Positioning Statements

BHWP Mission and Guiding Statements

In reviewing the literature about the site, three 'mission statements' and a statement I have described as a 'Guiding Statement' can be found, all of which are consistent and applicable to the interpretive program. They are presented in a hierarchical order with the Mission Statement identified in the Strategic Plan 2016-2021 at the top:

Overall Mission Statement: Bowman's Hill Wildflower Preserve inspires the appreciation and use of native plants by serving as a sanctuary and an educational resource for conservation and stewardship. *Overall Mission Statement, Strategic Plan 2016-2021*

General Mission Statement: Raise public awareness and promote knowledge of the ecological importance of using native plants.

In the description of the Education Zone, BHWP Plant Collections Plan 2018-2020

Educational Mission Statement: Provide the public with easily accessible information about using native plants in home landscaping.

In the description of the Garden Zone, BHWP Plant Collections Plan 2018-2020

Guiding Statement (From Strategic Plan 2016-2021.)

BHWP uses its 134-acre site to display and interpret a collection of over 600 Pennsylvania native plants species in a matrix of natural habitats. BHWP conducts relevant lectures, classes, workshops, tours, symposia and conferences, and engages in partnerships with groups of similar purpose. The goal of all these activities is to advance BHWP's educational mission while enriching the lives of visitors and preserving our natural heritage. To that end, BHWP will use the next five years to:

- Focus on the care and enhancement of the native plant collection
- Offer a variety of programs about their identification, conservation, landscape uses, and their importance to all life in a healthy and diverse natural world.

BHWP Values (Strategic Plan 2016-2021)

The following values were identified in the Strategic Plan 2016-2021. The consequent impact on the interpretive network was added for this document.

Value: Inspiration: We inspire our staff, volunteers, funders and lawmakers to advocate and act on the behalf of native plants.

Impact: The end goal of this value statement is to create an array of active stewards of native plants.

Value: Learning: We support life-long learning about native plants, especially their ecological importance and conservation.

Impact: The impact of this value is that what is sold in nature store, what is presented in programs, and other activities should clearly support life-long learning.

Note: This is consistent with the goal of interpretation, which is not to educate visitors, but rather to inspire visitors to education themselves on particular subjects, in this case, native plants.

Value: Community: We provide a supportive environment to all who have an interest in growing, understanding and conserving native plants.

Conservation: We manage our land to provide a wide variety of habitats for native plants and to steward our living collection.

Science: We facilitate scientific inquiry into the ecology, conservation, horticulture and stewardship of native plants; we learn and communicate about relevant science.

Note: This suggests using the interpretive network to provide research results and suggests supporting programs such as Citizen Science.

Action: We help people to understand, appreciate, plant and steward native plants on their own land and throughout their communities.

Note: This has a direct relationship to goals of interpretive program, and actions that need to be taken by BHWP, including working with local communities to develop off-site interpretive opportunities, such as 'Islands of Habitat.')

BHWP Positioning (Strategic Plan 2016-2021)

The Positioning Statements found in the Strategic Plan 2016-2021 serve that same purpose as 'Vision,' Desired Future Condition,' and Strategic Goals in similar documents. Regardless of the title, these statements focus on futured desired condition. We use the question 'what will this place look like and how it is used at the end of the next 20 years?' as a means of deriving similar information. The time frame is arbitrary, but does allow a long germination period for projects, yet is still short enough that people can 'see' that time frame (it is a generation).

The statements reflect the desired end point rather than the actions it takes to get there, which is essentially what you have captured under the heading 'Positioning' in the Strategic Plan. For example, the statement "The best place in the Mid-Atlantic to see and learn about native plants growing in natural habitats and communities;" reflects a desired end point and, consequently, is part of the vision for the next 20 years. In contrast, 'supporting life-long learning about native plants' is an action you take to achieve that position (vision). With that in mind, the following appears to constitute the overall position you want to attain in 20 years (your vision). Parts highlighted in green reflect my additions to your Positioning Statements.

In 20 years, BWHP will be:

- The best, and most credible place in the Mid-Atlantic to see and learn about native plants
 growing in natural habitats and communities. The credibility stems in large part from a sciencedriven approach. As a consequence of the range of credible information and opportunities onsite, BHWP is a highly desirable destination for people from throughout the region and beyond,
 to the extent that not all can be accommodated without damaging the resource and/or
 interfering with other functions of the site.
- 2. The 'go-to' place in the Mid-Atlantic that offers a comprehensive variety of programs about the identification, conservation of, gardening and landscape use and ecological importance of native plants. Part of the reason for the high status is that it focuses on low-maintenance, natural ecosystems, not high-input gardens. As a consequence, people from all around the Mid-Atlantic use information from the site on a regular basis, whether remotely or as a visitor.
- **3.** A model operation for others to emulate for a native plant preserve, and for how people can develop native plant communities, whether within their own yard or in public areas in their communities. As a consequence, similar organizations use BHWP as a model in developing their properties.
- 4. A sanctuary for a diverse range of native plant species of the Delaware Valley, including some that are rare, threatened, or endangered. This is consistent with the desire to create a sense of place, specifically, a sense of the Northern Piedmont in Bucks County (from BHWP Plant Collections 2018-2020 under Part VI Looking Forward).
- 5. As a consequence of work and opportunities by BHWP, the number of people in the Mid-Atlantic area who highlight native plants in their yards is significantly higher. (This is one possible manifestation of the goal of 'changing the world.')

- 6. As a consequence of actions by the Preserve the site enjoys a sustainable level of visitation from a broad cross-section of people.
- 7. The membership in the Preserve is significantly higher.
- 8. BHWP enjoys a steady stream of first time and repeat visitors throughout the year because it offers high quality experiences for everyone all year, including an outstanding array of interpretive and educational opportunities.

General Actions

To accomplish the desired 'Positioning,' BHWP has already identified the following general actions to take over the next 5 years (specific actions related to developing interpretive opportunities is the product of this planning effort):

- 1. Provide the public with easily accessible information about using native plants in home landscaping (Educational Mission).
- 2. Increase the diversity, care and enhancement of the native plant collection. (Strategic Plan 2016-2020 under 'Themes.')
- 3. Offer a variety of programs about the identification of native plants, conservation, landscape uses, and the importance to all life in a healthy and diverse natural world. (Strategic Plan 2016-2020 under 'Themes.')
- 4. Continue acquiring up-to-date information on the conservation of native plants and native plant communities in the mid-Atlantic area. This will be made available on-line and at the site, although no native plants specific to regions other than the Delaware Valley will be planted or raised at the Preserve.

Appendix B: Target Audience Profiles

Introduction

Information - including interpretation - is a commodity; people have to buy it with their time, a highly valued personal resource, along with attention and cognitive effort. They also incur opportunity cost; in other words, if they spend time reading a sign or walking an interpretive trail, they can't spend that time doing anything else. Since different people "buy" different interpretive experiences, it is important to identify the key target audiences, and then build profiles of those different visitor groups to determine the type of interpretive experiences they are willing to "buy" with their time, and the level at which the information must be presented so they are able to process given their knowledge and background. Ideally, the audiences you want to reach are ones that will help achieve your goals, even if those audiences are not currently or never will be actual visitors to the Preserve.

In general, experiences that visitors are willing to buy can generally be described as ones that:

- Meet their needs;
- Meet their expectations;
- Are within their limitations of time, money, energy, and other such personal resources;
- Are opportunities that compete successfully with other options for spending time, usually through association with interests that were the primary reason for visiting?

Needs include such basic amenities as food, shelter, and restrooms. The key information-related need is orientation and wayfinding. Interpretation is an option. Consequently, orientation and wayfinding must be addressed at the beginning of and throughout the visitor experience.

Expectations are more variable because they are created by previous experience, what people hear and what they read. Several of the issues noted for BHWP are due to incorrect expectations – that the site will have wildflowers at any time of the year, that it contains cultivated gardens, and that it is a nature center as examples.

Limitations are factors that prevent someone from engaging in an experience or interpretive opportunity, such as not knowing the language in which it is presented, and factors that tend to offset the reward for engaging in an experience and can therefore cause a potential user to bypass an opportunity. For example, visitors are often on vacation and do not want to 'work'—either physically or mentally—at their recreation unless the personal benefit is worth the time and effort required. Limitations can be related to physical ability, language, education level and other characteristics.

Opportunities that can compete for a person's time typically relate to a visitor's interests. Although those interests can exist prior to arrival, they can also be generated by what they see or hear on a guided tour, or by features they encounter. On-site features are of key importance because they represent one of the best opportunities to capture the interest of a visitor and begin the communication process.

Key Target Audiences

The focus of the audience analysis in Visitor Interpretive Experience Planning is to first determine the target audiences and then analyze those audiences to determine what type of *experiences* would attract them to the Preserve and/or that they would engage with when here. Once that is accomplished, interpretive opportunities can be identified that add value to those experiences, as the target audience defines value, and that they are willing to engage with and able to understand.

The list of target audiences includes traditional audiences, such as those already interested in native plants, gardeners, landscapers, birdwatchers, and nature photographers. Although these groups may not be targeted by interpretive opportunities because they already understand the key messages (although they do need information), it is important not to forget about them when developing visitor interpretive experiences. In addition, just because they are interested in gardening, native plants and/or associated fauna, does not mean that they are not open to new information.

The list also contains non-traditional audiences, important audiences if BHWP is to expand impact on people living in the area. Non-traditional audiences are likely to need more basic interpretation as a starting point due to lack of pre-existing knowledge.

Key target audiences for BHWP in general are residents of the Delaware Valley because the Preserve focuses on plants native to that area. In general, residents of Pennsylvania are important because this is part of the State Park system. Within those areas, key target audiences include those listed below. Note that a person can belong to more than one target audience, such as families and residents.

- 1. Gardeners and homeowners
- 2. Families with children
- 3. Birders and nature enthusiasts
- 4. Health and wellness enthusiasts
- 5. Group tours (25 max) (most likely groups like Master Gardeners or birders on a tour)
- 6. Landscape professionals
- 7. Non-traditional
- 8. Drop-ins

Finally, the profiles include People with impairments because they can be a part of any of the key target audiences .

Note: Theses are target audiences for the interpretive program, which does not include all the people that BHWP wants to serve. For example, the Preserve would like to serve Landscape Professionals and Landscape Architects to motivate them to use more native plants in landscaping. Reaching these audiences is likely to happen by other means than interpretation.

Audience Characteristics

Introduction

The primary purpose of identifying and profiling target audiences is to determine how to design an experience that they are willing to engage with and able to process the information presented. Some characteristics are applicable to almost all visitors. Those are listed first, followed by characteristics of specific target audiences. Of particular note are traditional versus non-traditional audiences. Sites like BHWP have a significant advantage in attracting and engaging traditional audiences (gardeners, nature lovers, bird watchers, nature photographers, wildflower enthusiasts, etc.) because they are already interested in the primary topic – native plants and the importance of using them in landscaping instead of non-native plants. In addition, the actual experiences, such as watching birds, walking the trails and buying plants at the plant sale are all experiences that traditional audiences are likely to be attracted to.

Reaching and serving non-traditional audiences, who are important if BHWP is to significantly expand the number of people that can be reached by the interpretive network, is typically more difficult because they are not inherently interested in the particular focus of an area such as BHWP. Consequently, it may be necessary to develop new experiences that appeal to non-traditional audiences. In terms of experiences that could attract this audience, events can be quite effective because they can serve traditional audiences at the same time, and do not require investing in a significant amount of new infrastructure. To serve them once they are here, interpretive information has to start at a more basic level, and can't assume that these audiences care about native plants to the extent that they become an active steward of natural resources in the area, especially native plants.

BHWP has two distinct advantages in attracting non-traditional audiences. The first is that it provides educational experiences in an authentic natural setting, something that appeals to a majority of families with children. The other advantage, which is also an issue, is that it offers an opportunity to see wildflowers, which is of interest to lots of people who are not nature enthusiasts or gardeners. Consider the attraction of BHWP when bluebells are in bloom. As noted, the attraction to wildflowers is also an issue because they do not bloom throughout the year.

All Visitors

The following characteristics are true for most if not all people visiting an unfamiliar site.

Note: Regardless of the target audience, it must be assumed that all preferred learning styles and all physical impairments will be represented in any visiting group. It also must be assumed that children will be a part of any group as will the elderly.

Characteristic: All visitors will expect anyone associated with the Preserve to answer basic questions regarding basic cultural and natural history, especially about native plants in general and wildflowers in particular.

Implication: All on-site staff need to be able (and willing) to answer basic questions and direct visitors to on-site locations where they can obtain additional information.

Characteristic: Visitors will expect orientation information to interpretive and recreational opportunities in the surrounding area (what is there to do around here?), especially opportunities with a similar focus as the Preserve.

Implication: Staff should be prepared to answer such questions, particularly regarding sites telling a part of the same story.

Characteristic: A significant percentage of visitors can be reached using social media such as Twitter, Blogs and Facebook, and a significant percentage of visitors are comfortable with and prefer using new technologies, such as vodcasts, podcasts and GPS-based tour programs.

Implication: When possible (the Preserve has bad or non-existent cell phone coverage in parts of the Preserve), New media should be used as part of the information delivery network when appropriate to the audience and situation. Social media should also be used to maintain a link to visitors, thus providing a channel for marketing upcoming events.

Characteristic: Many travelers plan part of their trip, including general itinerary, prior to arriving. Many will use the INTERNET to access information in order to plan.

Implication: Marketing, complete trip planning and basic orientation and wayfinding information should be available on the INTERNET.

Characteristic: People tend to visit in groups, typically family or friends. Families and other similar groups have a variety of educational levels within the group.

Implications: This characteristic has several implications:

- Interpretive opportunities such as signs and exhibits should be designed to accommodate at least small groups.
- The interpretive program should provide opportunities that allow all members of a family or group to be involved at the same time and place, despite having different educational or experiential backgrounds. This can be accomplished by providing several opportunities in one location, each catering to a different educational level, or a single strategy that is designed in such a way that everyone in the group has an intellectual entry point into that exhibit.
- The interpretive program must offer opportunities that are understandable to audiences with limited expertise and knowledge.

Characteristic: Families tend to visit more often in summer months when most schoolchildren are on summer vacation. Older visitors are better represented in the shoulder seasons.

Implication: This characteristic has several implications:

- Parts of the interpretive network should be able to be easily changed to take advantage of seasonal changes in audiences.
- Programs in the summer months should be more family oriented.

Characteristic: People visiting an unfamiliar area are focused initially on meeting needs, including the need to feel confident in their ability to navigate the unfamiliar environment.

Implication: It is important for the orientation and wayfinding network to be designed to make all visitors comfortable and confident in their ability to find their way around, and that it is offered at the beginning of the visitor experience and at key points throughout. This will help alleviate concern on the part of any visitor regarding their ability to find their way around in the Preserve, and back to wherever they need to go. It was noted in the information gathered that finding their way back to the Visitor Center is an issue for some visitors.

Characteristic: Visitors will have varying limitations in terms of energy, time, and interests.

Implications: This characteristic has several implications:

- To the extent possible, the interpretive program should offer opportunities to "skim," "browse," or "gorge" the information to accommodate preferences and to accommodate visitors on a tight schedule.
- The interpretive program should provide an 'opportunity menu' that lists time required for
 each activity and suggested itineraries based on time available. For example, it should
 suggest an itinerary for the visitor that has a half-hour, 2 hours and a half-day. Note that
 visitors do ask what to do if they have limited time.
- Frequent and well-placed opportunities to sit and rest in the shade will enhance the experience for many people.
- To the extent possible, the interpretive program should present information in a way that is rewarding, within a visitor's limits imposed by a 'leisure' activity, and organized according to themes to eliminate unnecessary effort.

Characteristic: Many visitors will have a general lack of knowledge regarding native plants and ecology, while others will have a significant amount of knowledge.

Implication: The Interpretive Program must not assume knowledge, especially because the Preserve wants to attract non-traditional audiences in quest of having more impact. Visitors must have the opportunity to start at a point that assumes little or no knowledge, but they also must have the option of skipping to an entry point based on their knowledge.

Characteristic: Any given group of people is likely to have one or more preferred learning styles within the group. The suggested number of different learning styles depends on the model. The most common model has 3 - visual, auditory and kinesthetic; others have more. Regardless, within any given audience you will have those who are more likely to engage with experiences involving social interaction, others who are more likely to engage in experiences offering the opportunity for 'hands-on,' and those who want to 'see' what you are trying to communicate.

Implications: Since audiences are voluntary participants, offering information in the preferred learning style of the participant is more likely to be successful; if they are uncomfortable it is likely they will choose not to participate. Since all learning styles are likely to be represented in any one group, optional learning environments should be created to accommodate each group. For example:

Hands-on. An environment where visitors can work ideas and concepts out for themselves.

- Observation: An environment where visitors can collect, analyze and reflect on information
 to come up with a concept. Information can be presented in myriad forms, such as images,
 sounds, text, scents, and textures. It can also be presented in person, although interaction
 should not be forced.
- Social: Most people visit in groups within which social interaction in relation to the
 information being presented will occur. Create opportunities for groups to discuss ideas.
 This is especially important for families. Also, if possible, create an environment with the
 option of asking someone questions.

Characteristic: Prominent cultural features, especially ones historic in nature, such as the historic house and the bridge, are likely to elicit questions.

Implication: Although the interpretive network does not have to focus on cultural features and history, it needs to include at least answers to basic visitor questions regarding these features.

Characteristic: People are drawn to water.

Implication: Water access areas need to be clearly defined.

Characteristic: Urban audiences are often not very familiar with nature in its natural state, leading to a heightened sense of fear.

Implication: Efforts must be made to make people feel safe in this environment, and to connect them with nature in its natural state in a positive way.

Gardeners and Homeowners

The homeowners in this profile are ones who already see plants in general as adding value to their quality of life, and are or could be interested in using native plants in landscaping, although they are not necessarily knowledgeable about gardening, planting, landscaping, etc. They are likely to be interested in both plants and landscaping ideas. In this project, we are assuming that this audience is from the Delaware Valley or areas in which the native plants offered in the Preserve would be native. Key characteristics and implications include the following:

Characteristic: Have space available for planting native plants in their yards, and are interested in plants and ideas.

Implication: Need to offer information on plants and combinations of plants for landscaping yards.

Characteristic: Will likely be interested in plants that are more likely to survive in the local environment, take less water, are attractive in all seasons, etc. May be interested in attracting birds.

Implication: These characteristics of plants should be highlighted, perhaps including images of the plant in different seasons.

Characteristic: Are likely to be concerned about aesthetic impact of using native plants, especially if they are concerned about keeping their yard 'beautiful.' They may be more interested in aesthetics than native plants when they arrive.

Implication: Need to *show* them how plants will look in different seasons.

Characteristic: Are not likely to be able to or want to change their entire yard to native plants at once.

Implication: To the extent possible, need to provide information on how to gradually convert a yard to one with all native plants.

Characteristic: Assuming they live in the local area, this group has a high potential for repeat visitation, and in becoming members. They are also likely to be interested in seminars regarding landscaping their yards.

Implication: To the extent possible, obtain email contact information to keep this group aware of events, sales, relevant talks by landscapers, etc. Also, ensure that they know that seminars of interest are offered periodically.

Characteristic: This group is essentially carrying a part of the Preserve outside the borders so they can be spokespeople, and in fact may be called upon to explain to neighbors why they are planting specific plants.

Implication: Need to provide this group with talking points regarding the value of planting the native plants they are choosing to plant.

Characteristic: They may not be inclined to walk the trails since their primary interest is on obtaining plants and/or information.

Implication: Thematic Overview needs to be available in the same area that they would frequent if looking at plants to buy. Also, areas landscaped with a combination of natural plants may be of more interest to this group since they are trying to get an 'image' of what their yard might look like with combinations of native plants.

Families with children

Characteristic: Families are made up individuals of many ages.

Implications: There is a need for a variety of interpretive strategies to address numerous learning styles and education levels. Experiences need to be within close proximity to amenities to account for the range of frequency in need to visit restrooms.

Characteristic: Families often have strict time limits based on the needs of various members.

Implication: Experiences need to be at convenient times and flexible in order to adapt to family needs.

Characteristic: Families have a need for a sense of safety and security.

Implications: Facilities need to be well-maintained, accessible, and secure. Guidelines for safety need to be well-communicated.

Characteristic: Family experiences are social.

Implications: Experiences need to engage the family as a whole, ideally with parents facilitating activities for their children.

Characteristic: Parents like the idea of exposing their children to new experiences. An experience in the natural world, such as the ones offered at the Preserve, constitute a 'new' experience for many urban dwellers. However, it is one that they will not assume is 'safe' because it is likely an unknown.

Implications: The interpretive experiences, although they focus on inspiring rather than educating, need to be perceived as having obvious educational outcomes. It must also communicate that it is safe.

Children in General

Reaching children is not about dumbing down the information presented. It is about offering experiences in nature that allow children to gather information firsthand using their senses to help build emotional, physical and intellectual connections to the extent possible, and laying groundwork for understanding key concepts when they are older. Key characteristics include ones relating to their physical limitations and assets, and one relating to mental limitations.

Characteristics - Physical: Children are short. They also often have an abundance of energy.

Implications: Viewing opportunities and material addressed to children needs to be at a comfortable height. In addition, interpretation-related opportunities that involve expending energy should be identified and developed.

Characteristics – Mental: Children are a challenge because they have limitations regarding learning the same way as adults. Whereas adults can learn by processing incoming verbal information based on past experience and existing knowledge, children up to around the age of 8 do not have a vast storehouse of existing experiences and knowledge. Consequently they are primarily focused on acquiring information firsthand. Since they have not completely mastered the symbol system we call "language," they use their primary information-gathering tools – their senses – to explore their environment.

Implications: Opportunities to touch, smell, taste, see and hear are critical to an effective experience for children. This is an important point because we often focus on the need for activities to be interactive, and believe we have accomplished our goal if they can push buttons. Although the opportunity to interact in such a way increases the attraction power of an opportunity, if it is not an opportunity to discover information using senses, it is not nearly as effective for children in terms of gathering and processing information.

Birders and Nature Enthusiasts

This group already has a vested interest in the natural world, although that does not mean that they are aware of the value of native plants. Key characteristics and implications include the following:

Characteristic: Nature is already an important component of their quality of life.

Implication: Because of an inherent interest in nature in general or specific aspects of the natural world, this group is perhaps the easiest to convert to conservationists if they are not already. The key is to use loss of those aspects of the natural world that they value as the hook to motivate them to become better stewards.

Characteristic: Birders are very likely to be interested in native birds.

Implication: Tying native birds to native plants as part of their crucial habitat requirements is likely to be an effective approach for birders. Consequently, information on birds should include the native plants they depend on.

Characteristic: May be self-directed and focused on specific aspects of nature and specific experiences they want to engage in rather than having a primary interest in interpretation or to 'see what's going on.'

Implication: It is important to provide information that allows this group to engage as fully as possible in the experience they desire as quickly as possible. This includes such strategies as having an ever-changing list of birds that have been sighted along with information on when and where the sighting occurred. The wayfinding information needs to be clear.

Characteristic: In contrast to homeowners interested in landscaping their yards, this group is highly likely to want to walk at least some of the trails.

Implication: They may not stop to review Thematic Overview information so it must be woven into experiences along the trails.

Characteristic: This group is likely to want some degree of solitude in contrast to people who might be focused on walking trails for health reasons.

Implication: Areas where people can achieve a degree of solitude where they are more likely to be able to immerse themselves in the environment should be marketed to this group. Also, it will be important to direct other users who are not interested as much in solitude, such as fitness enthusiasts, to other areas of the Preserve.

Characteristic: May desire solitude more than other user groups plus an opportunity to immerse themselves in nature.

Implication: This group can have a great experience without interpretation. Interpretive information that is offered should be in non-visually intrusive formats (not signage) in order to increase the potential for immersion in the natural environment.

Health and Wellness Enthusiasts

This group of people is not necessarily already convinced of the importance of native plants, although they may be convinced of the value of nature. The characteristics of this group may affect marketing the Preserve more so than the interpretive information provided. Key characteristics and implications include the following:

Characteristic: Some of this group is going to be interested in walking trails for fitness.

Implication: Providing information on loop trails, combined with information on mileage and difficulty will likely appeal to this group.

Characteristic: They are interested in personal health.

Implication: Information on the value of Native Nature in achieving personal health should appeal. This includes information on issues with Nature Deficit Disorder and other similar topics.

Characteristic: This group is likely to be more interested in continuing to walk rather than stopping to read panels or gather interpretive information.

Implication: Highlighted routes should not be the same as the ones highlighted for birders and nature enthusiasts, and can include elements of a built environment (such as the road).

Group Tours

Based on discussions with participants in the planning meetings, this group does not arrive by bus – bus tours simply don't work well, in part because of the limitation of facilities. For the purposes of this plan, we assume that most of the people in the group arrive separately, which helps mitigate the parameter of limited facilities. Group tours refers more to people of similar interest being provided information from a person in a group format, such as a bird tour or a tour of Master Gardeners. Because the group is already likely to have a specific interest, and because the tour is guided, the tours can be tailored to specific interests, such as birds.

Characteristic: The key characteristic that affects the information network is the fact that it is a rather large group.

Implication: A staging area is needed where people can wait for the beginning of the tour. Ideally, this is close to the restroom and to parking so it is easy to find. In addition, stops for the tours should be in spaces where the group can gather around the tour leader.

Characteristic: The primary method of delivering information is personal (the guide).

Implication: Guides should be trained to incorporate the messages into their presentation.

Landscape Professionals

Characteristic: This group is not likely to be coming to the Preserve for interpretive information, but rather for information on native plants that could be used by themselves or in combinations for landscaping purposes. The following characteristics are true for most if not all people visiting an unfamiliar site.

Implication: The Preserve should have detailed resource materials available regarding the value of using native plants and combinations of plants to use for landscaping. The information should perhaps be more detailed than most of the information for other visitors.

Characteristic: This group must 'sell' their clients on the use of native plants.

Implication: This group needs to be supplied talking points on the value of using native plants, with that value being in terms that a homeowner is likely to appreciate, such as resistance to disease, resistance to drought, more likely to thrive, etc.

Non-traditional Audiences

This includes people who are coming for something offered at the site, such as a wedding, a conference or some other event rather than because of the actual site. In other words, this group is attracted primarily be the event rather than by the site. However, they do have the potential to be attracted back to the Preserve on a return visit based on what the Preserve offers rather than for a specific event.

All Non-Traditional

Characteristic: This group is attracted primarily by the event rather than the site.

Implication: Interpretive opportunities targeting this group should be integrated into the event that attracted them to the site with a focus on attracting them for a return visit.

Characteristic: This group is not likely to have a lot of time outside of the event that they are attending.

Implication: Interpretive offerings should be ones that require only a brief amount of time, and located where members of this group may be during times that they are not taking part in the event.

Wedding Guests

Characteristic: People attending a wedding will typically be focused on the event, which includes mingling with people before and after the service.

Implication: They may be a hard audience to reach with interpretive opportunities during the wedding. However, they do have the potential to return, so providing engaging interpretive

information that does not take a long time in terms of engagement, located within or adjacent to areas frequented by wedding guests, could attract people from this audience to return.

Characteristic: Despite a focus on the event, wedding guests will have some level of interest in the site and what it offers.

Implication: Basic information should be made available, with the intent of trying to convert the wedding guest into a return visitor.

Drop-ins

These are people who could be traditional or non-traditional audiences. The distinguishing characteristic is that they decide spur of the moment to drop in, which means that they don't necessarily look up any information ahead of time. Consequently, the are likely to be making the decision based on name. It also implies that they have never been to this location before.

Characteristic: Since this audience is likely making their decision based heavily on the name, they are perhaps more likely than other audiences to expect to see wildflowers, and not necessarily a native plan Preserve.

Implications: The 'What's in Bloom' exhibit is likely to be very appealing to this group. Directions on where to go to see the plants in bloom must be proximate to this exhibit and very clear because this is not an audience who has been to the Preserve before.

Characteristic: Since this group is less likely to look up information ahead of time, they are non as likely to be aware that BHWP charges a fee.

Implications: Unless there is a Gatehouse for paying a fee or an automatic fee collection station, this group may park and simply start exploring, especially if the Visitor Center is crowded. Consequently, it needs to be clearer to visitors during their travel along the access road that a fee is charged.

Characteristic: This audience is not going to be aware when they enter that seeing the Preserve requires walking. It will also not be apparent when they pass the Visitor Center because the road appears to continue. They are also not likely to be aware that they have to park in the Visitor Center parking and enter the Visitor Center to pay a fee

Implications: Consideration should be given to a sign that asks all visitors to check in at the Visitor Center before continuing with their visit.

People with Impairments

Note: This is not a separate audience in terms of planning experiences specifically for this audience. They do not, as a general rule, want to be separated out from others. For the sake of this planning effort, we assume that every one of the target audiences can include people with impairments. The group profiles are included to help design interpretive experiences that meet the needs of a few while enriching the experience of many.

The ADA is a civil rights law ensuring that the 20% of the U.S. population with disabilities have the opportunity to participate in all areas of public life. Using a Universal Design Approach, which focuses on creating experiences that can be enjoyed by all parts of the target audience, including people with disabilities, involves integrating multiple delivery tactics that involve multiple senses within the same interpretive opportunity. The result is an overall array of experiences with opportunities for everyone.

A Universal Design Approach also benefits our aging population because it is physical change, such as deteriorating eyesight, hearing and mobility that are the core of the issues that older adults have with interpretive and recreational experiences, not their age. Therefore, a separate category for 'older adults' is not needed.

The overarching implication is that the interpretive program should adhere to universal design standards to make the information accessible to all people, despite any impairment, whether it is visual, auditory, physical or otherwise. The following are specific characteristics and implications based on specific disabilities.

Mobility Impaired (includes those in wheelchairs)

Note: The comments under People with Impairments included solutions (ideas) and a reiteration of implications already noted.

Note: Surfaces that provide easy access for wheelchair users also generally work for people who use other mobility devices such as a walker or cane.

Characteristic: Visitors who use manual wheelchairs, power wheelchairs and scooters sit at varying heights but are lower to the ground than a standing adult, making it harder to see objects and read text mounted at a height intended for someone standing.

Implications:

- Take into account the average sightline for adults who are shorter in stature or use
 wheelchairs as well as the sightlines for standing adults. Use the height where the sightlines
 overlap for mounting heights. A good set of guidelines can be found at:
 https://www.si.edu/Accessibility/SGAED#page 21.
- Design exhibit interactives so they are within reach range of people who use wheelchairs as well as for standing adults. The following is a link to Chapter 3: Building Blocks of the ADA Standards. The chapter focuses on information related to physical access.
 https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/ada-standards/chapter-3-building-blocks#308%20Reach%20Ranges.

Exhibits with text need to have it located at the right height and angle to be easily read from
a wheelchair. All interpretive opportunities, including outdoor signage, needs to be designed
for knee and toe clearance, thus allowing the person to get closer to text and other features
of an exhibit. Pushbuttons and other devices that activate parts of the exhibit have to be
within reach of someone sitting in a wheelchair.

Characteristic: Visitors who use wheelchairs or scooters need maneuvering clearance.

Implication: This has to be taken into account with all infrastructure – parking areas (accessible spaces), width of walkways, hallways, wheelchair locations integrated into the seating plan for a public program, etc.

Characteristic: Manually operating a wheelchair is physically challenging for some visitors depending upon the topography and surface they are navigating. Some people may need to move more slowly or may tire more easily.

Implication: Program pace (in terms of speed when moving) must be slowed down. Plans should be made for additional time between program stops, and program routes may need to be shortened.

Characteristic: Visitors who use wheelchairs do not like to be singled out. They prefer to participate in the same experiences as everyone else.

Implication: The Interpretive Program should be inclusive, and be designed to treat everyone in the same manner. All elements of the Interpretive Program should be designed using a Universal Design Approach. That approach seeks to ensure that everyone can be involved in an interpretive opportunity at the same time and place.

Characteristic: People in wheelchairs have to expend significantly more time and effort to travel to and access sites. Consequently, they want to be sure that the experience that they are 'buying' with their time and effort will be worthwhile.

Implication: The website must contain detailed information on the experiences available to those in wheelchairs. In addition, since the Interpretive Program is designed as a network, with each opportunity marketing other opportunities, the 'marketing' information must make the benefit of engaging in the experience and the cost in terms of time and effort clear.

Disability: People who are blind or have limited vision

Characteristic: Difficulty seeing clearly or at all.

Implication: Key information should be offered in an audio format, ideally with supporting tactile elements (which will also appeal to other audiences). To facilitate reading by those who are experiencing some loss of vision, fonts should be easily readable with font size large enough to achieve a high degree of probability that people with low vision will be able to read the text. Also use universal symbols when appropriate.

Characteristic: People with vision loss need mobility and orientation information to successfully navigate unfamiliar terrain.

Implication: An accessible route is equally accessible to people with mobility and vision disabilities. There must be at least 2030 mm (80 in.) of clear head room along the circulation route. Obstacles to be avoided include overhanging branches. Color contrast on the edge of a path can be useful.

Disability: People who are deaf or have hearing loss

Characteristic: There is a range of hearing loss, from slight to profound. People who are Deaf often identify with the culture and language (American Sign Language) of their community.

Implication: Effective communication can be achieved through written materials, an accessible website, hiring a sign language interpreter for a program on request, and assistive listening equipment.

Residents of Delaware River Valley

In addition to the characteristics noted for all audiences, the following are key characteristics of residents in general that could apply to residents of the surrounding area and should be considered in developing the interpretive network.

Characteristic: This audience has the potential to benefit the most from programs and opportunities at the Preserve because the plants grown and highlighted at BHWP come from the Delaware River Valley. They are also more likely to use plants sold at BHWP in landscaping because they will be native to the area in which they live.

Implication: The interpretive program and outreach efforts should focus on this group of people because of what BHWP has to offer them, and because they are more likely to use plants from the nursery, volunteer, donate, become a member, and behave in other ways that support the mission and goals of BHWP.

Characteristic: Since they live close to the Preserve, local residents have a higher potential for repeat visits than people who live some distance away.

Implication: Although the site will change with the seasons, thus providing different experiences that may motivate them to make a return visit, a changing variety of interpretive activities and programming will also help motivate them to make a return visit.

Characteristic: Local residents may feel a connection to the Preserve as part of their community.

Implication: Residents of the area may feel a greater pull to become a volunteer or become a member.

Characteristic: Residents often have specific times when they could participate in interpretive opportunities, such as in the evening and during weekends. They are also present year-round. They are often interested in local issues because of direct impact on their lifestyle.

Implication: Serving residents effectively may require programs specifically designed for this audience or a segment of this audience, and scheduled at times they can attend.

Characteristic: Residents often prefer more in-depth material if about the area, and/or can handle more in-depth material because of familiarity with an area and local issues.

Implication: Opportunities to obtain material that is more in-depth, such as purchasing publications, should be available.

Characteristic: Some residents get to the point of considering this type of place 'theirs' and resent visitors from outside the area, especially when they interfere with activities in which the residents want to engage.

Implication: Having special programs that cater more specifically to residents may be effective in countering resentment by residents toward visitors.

Residents of Pennsylvania outside of Delaware River Valley

Characteristic: Although this group of people will not necessarily be served as well by the opportunities because the plant collections focus primarily on the Delaware River Valley, the ecological make-up of many of those areas will contain some of the plants contained in the Preserve.

Implication: It will be important to note the full range of plants in the Preserve and for sale, and also note the locations in PA where they will thrive.

Characteristic: Although they may not be as familiar with this place in particular, they are more likely to be aware of Pennsylvania history, and within that history, knowledge of the types of projects worked on by the WPA/CCC.

Implication: If the cultural features are part of an interpretive opportunity, the opportunity should include multiple entry levels to provide a starting point for all visitors, from those with some knowledge of PA history to those who have none.

Appendix C: Parameters

Introduction

Parameters are those conditions under which visitor experiences and the associated Interpretive Program must be developed, such as monetary constraints, and under which it must function, such as weather. They are also called 'givens,' 'circumstances' and 'constraints.' Identifying parameters and their implications ensures selection and development of experiences and interpretive and wayfinding strategies and infrastructure that are effective and realistic, not idealistic.

The following section contains key parameters that could affect either the developing or functioning of visitor experiences at BHWP. In reviewing the parameters, it is important to remember that they represent what <u>is</u>, not what should be or what is desired. It is also important to remember that people not engaged in the planning process will read this document, which is why it is important to note what you are already doing to deal with parameters and why.

Key Parameters

Budget

- **B-1:** Budget is not likely to be sufficient to implement everything recommended in the plan at the same time. The plan needs to be structured so it can be implemented using a phased approach. In addition, the first experiences developed should be highly visible with a high probability of quick return on investment to maintain momentum.
- **B-2:** Plant sales are an important source of income, and the nursery that supplies those plants and plants for the site is an important part of the operation. The interpretive program must not interfere with this function, and should, if possible, enrich the experience of buying a plant by providing interpretive opportunities.
- B-3: New buildings / infrastructure specifically a new Visitor Center located along what is now the exit route have been suggested as a possibility by the Planning Work Group at BHWP. Additional facilities / structures will require additional maintenance and perhaps additional security, both of which represent additional costs and need for increased operating budget.
- **B-4: The Pavilion is a rental facility, garnering valuable income.** The Interpretive Network should minimize interference with the rental of the pavilion, unless alternate sources of income can be found to replace the amount lost.
- **B-5: The Pond is popular for weddings, another source of income.** The Pond should contain optional interpretive opportunities to avoid significant negative impact on the interpretive experience when the area is being used for weddings.
- B-6: It is possible that weddings are taking resources away from basic needs, such as maintaining trails.

Staffing

- S-1: BHWP has a limited number of staff and volunteers trained to provide interpretive services. This has several implications:
 - Although personal interpretive services should be offered whenever possible, the visitor
 interpretive experiences must be designed to function with no or limited number of staff to
 ensure a viable interpretive experience even when no staff are available.
 - If additional interpretive opportunities requiring staff/ volunteers are to be developed, additional staff/volunteers will be necessary, and training those new staff members will be critical.
- **S-2:** BHWP relies on volunteers to give programs, lead tours, and provide other services that involve interfacing with the public. Training programs that include interpersonal skills should be offered on a regular basis. These could be used as a method for potential volunteers to 'get their feet wet,' in which case they should be offered for free (eliminate cost as a barrier).

Environmental Conditions

- **E-1: Weather can be harsh in the winter.** Outdoor signs and structures must be constructed of materials resistant to the weather conditions (ice, freezing, damp) or removable. However, the latter strategy requires storage space.
- **E-2: Inclement weather can occur any time of the year, especially fall, winter and spring.** If the Preserve wants to sustain visitation all year, the type and extent of opportunities inside or in sheltered areas need to provide enough motivation for people to visit during those time periods. At this time the site has very few sheltered areas.
- **E-3:** Wet weather creates muddy conditions, some of which visitors have to navigate in order to have an experience at BHWP. Consideration should be given to paving the parking area, which would also allow the inclusion of crosswalks. If a new facility is to be built, a 'mud room' as part of the entry area should be considered.
- E-4: Since people work in the Preserve during open hours, there are issues with noise from a variety of sources, such as leaf blowers and tractors, and staff in general (issue with programs in the building).
- **E-5: Proximity to River Road creates issues with noise from traffic, especially from motorcycles.** This diminishes the potential for interpretive opportunities in the meadow.

Physical Infrastructure and Layout

PI-1: The Preserve includes multiple trails and a variety of routes a visitor can take to explore the site, contributing to current issues involving wayfinding. A good orientation and wayfinding system should be developed.

- **PI-2:** The Preserve contains historic structures (house and bridge) that are likely to elicit questions from visitors. The interpretive network should include opportunities that focus on these cultural features, but should use such opportunities to move the focus to the natural world in which the structures are located.
- PI-3: The Preserve has a Visitor Center, although it shares the space with a variety of other functions, reducing the effectiveness of the Visitor Center, the Gift Store and the Administrative Offices. Indoor interpretive opportunities can be (and already are) a part of the visitor experience, although they are somewhat limited due to lack of dedicated space and issues with access when the building is hosting events / programs.
- PI-4: The Preserve has built a pond, pumphouse, and pavilion with landscaping in the north part of the Preserve adjacent to the exit route. This built environment is popular for weddings, and is popular with visitors, although it requires a walk from the Visitor Center since it has very limited parking. Given the 'built' nature of the environment, and the fact that it is fully accessible, this site is better suited to be at the beginning of a visitor experience rather than at the end if the desire is to move visitors gradually from a built to a natural environment.
- **PI-5:** The site has a plant nursery in close proximity to the current Visitor Center building. This facilitates the plant sales, and creates the opportunity to attract people to the Visitor Center who are coming for the plants, and vice versa. It also creates a good interpretive opportunity. It is unlikely that this will be moved in the near future.
- **PL-6:** The fencing to keep deer out is quite visible from the bridge because it extends across and into the water. It is a feature that needs to be explained, and is an opportunity for focusing on issues created by deer.
- PI-7: The Preserve already has a network of interconnected trails / pedestrian walkways (5+ miles) that access virtually all parts of the site. Additional visitor experiences can be developed without the need to build more trails, thus reducing the cost for implementation.
- PI-8: The Preserve currently manages a pavilion, with associated parking, in the grassy meadow near the entry from River Road that visitors currently encounter prior to arriving in the primary area of the Preserve. Because visitors encounter it first, some are confused and end up parking in that area rather than proceeding into the part of the Preserve that is fenced.
- **PI-9: The Visitor Center is located at the highest point in the Preserve.** Getting back to the Visitor Center and associated parking area will require moving uphill at the end of an experience. This is likely to be somewhat difficult for many audiences, so it should be made clear before a visitor begins exploring the site.
- **PI-10:** The Preserve is connected to Bowman's Tower by trail. Visitors can choose to walk the trail, although this will hold people on-site longer, potentially contributing to parking problems. Note that the habitats on Bowman's Hill are different from those currently found on the Preserve, so a walk on Bowman's Hill can still be one that focuses on native plants. The reverse is also true. Visitors to Bowman's Tower can choose to walk down to the Preserve.

- **PI-11:** Not all trails are all-weather trails. The trails should be classified (if they are not already) based on accessibility during inclement weather, and information offered that indicates trails appropriate to the current weather and conditions.
- **PI-12:** The Preserve contains a lot of trails that are paved, or hard-packed. The Preserve can offer relatively extensive experiences to people with mobility impairments.
- **PI-13:** The Preserve contains a platform originally created for bird viewing, although it is not in a particularly good location for birdwatching. It should not be marketed as a bird viewing platform, but it is still a valuable piece of infrastructure because it creates an opportunity for visitors to go off the main trail and into the woods without trampling plants.
- PI-14: One of the most popular seasonal phenomenon (the riparian area of Pidcock Creek covered in bluebells), occurs at the lowest place in the Preserve. Without assistance, this opportunity is not really accessible to people with mobility issues.
- **PI-15:** The Visitor Center already contains a nature store (Twinleaf Shop). This is an existing outlet for information to facilitate Extended Experiences, and to facilitate visitors taking actions that help achieve the goals and objectives, such as by landscaping their yards using native plants.
- **PI-16:** The site contains a limited number of washroom facilities (at the Visitor Center and Moore **Pavilion).** This could hamper exploration of BHWP because the existing facilities are located on the edge of the site rather than in strategic central locations.
- **PI-17: Designated parking areas in the Preserve (excluding the meadow) are limited.** This can be an issue during events and popular visiting times.
- PI-18: Space for the Nature Store is quite limited.
- PI-19: The Visitor Center cannot really be expanded to better accommodate the uses it now supports. Given the desire to have as much impact as possible, a new facility should be added some time in the future.
- **PI-20:** The Preserve encompasses a significant amount of area with numerous trails. This creates a higher probability of people getting lost, or people finding themselves in remote parts of the Preserve when they need facilities and/or are too tired to get back.
- **PI-21:** A significant amount of parking is available in the meadow area; however, it is a significant distance from the Visitor Center. This is utilized during times of heavy use, but would be more effective if a shuttle or some other form of transport was available.
- **PI-22:** The space between the parking area and Visitor Center is relatively narrow. This creates potential issues with congestion if we attempt to stop people in this area to provide thematic overview.

Location and Access

- **LA-1: The Preserve is not currently served by public transportation.** Visitation may be capped due to parking area limitations. This may not be an issue except during major events, and weekends in the spring and summer.
- **LA-2:** The Preserve is removed from population centers. Most visitors will arrive by personal vehicles, which will require parking. (The Preserve currently has issues with people parking along the road, and sometimes outside the gate in such a way as to block traffic.)
- LA-3: The Preserve is adjacent to the Thompson-Neeley Homestead (across River Road), and the grist mill associated with that site, which can be accessed by foot trail from the Homestead. The easy access creates issues with people not paying the fee to access the Preserve, either because they think that the fee they already paid for the park covers the Preserve, they do not know there is a separate fee for the Preserve, or they just wander on to the Preserve and don't bother paying the fee.
- LA-4: The Preserve is located near Bowman's Hill and Tower. Visitors confuse the two sites due to the name. This suggests a need for better orientation and wayfinding prior to arrival.
- LA-5: The site is hard to find from River Road, and somewhat confusing when on-site where to go, where to park, etc. The orientation and wayfinding system needs to be improved, including the elements on River Road.

Policy and Legal Issues

- **PL-1: BHWP is a part of Washington Crossing Historic Park, so it is owned by the state.** It must comply with all state regulations regarding the site.
- PL-2: BHWP signed an agreement with PHMA, the prior owner, that supersedes many of the state regulations pertaining to such areas, and provides a solid base for BHWP to exist for all time.
- **PL-3: All operations must comply with ADA rules and regulations.** All information presented within the interpretive network must be accessible in some way for those with disabilities. Note that the existing 'accessible trail' connecting the pond to the Visitor Center does not meet ADA requirements.
- **PL-4: State park policy requires that participants sign liability waivers before taking part in recreation programming.** If interpretive opportunities require engaging in a recreational activity besides walking, the opportunity to sign a waiver must be built into the experience.
- **PL-5: Highway signs are under the jurisdiction of PDOT.** Components of the wayfinding system requiring additions/modifications to highway signage will require working with PDOT, and will likely require a longer lead time than alterations to components that are within the jurisdiction of BHWP or DCNR.

PL-6: Infrastructure needs to meet established state and agency policies. Restored structures need to meet established safety codes. New structures will need to be constructed to meet established codes. Both increase the cost of creating or restoring infrastructure.

PL-7: All modifications to existing structures and landscapes and development of new facilities and landscapes shall be consistent with DCNR policies, which promote:

- Environmentally sustainable land use;
- Building uses compatible with existing historic construction and natural environment;
- Appropriate partnerships to assure economic sustainability.

PL-8: Modifications to historical structures shall comply with the Secretary of the Interior's Standards for Treatment of Historic Properties. The Standards for Treatment will apply to the historic cabin and possibly the bridge.

PL-9: By policy, the Preserve will focus on plants found within the Northern Piedmont Ecoregion. Most of the Delaware River Valley is in this ecoregion, so for those from the valley, the Preserve offers an opportunity to see plants and plant communities that they could use for landscaping, and the opportunity to buy such plants. For those from outside the area, but within the mid-Atlantic region, the Preserve needs to have obvious information of value regarding how to plant and use plants native to those areas, but has to do so without using actual plants.

PL-10: By policy, no pets are allowed in the fenced portion of the Preserve, even if on leash. This needs to be communicated so potential visitors get the information prior to planning a visit so they do not show up with their dog. Note that pets are allowed in the meadow area, which is not fenced. Note also that legally the Preserve can't deny access to people with service dogs.

PL-11: BHWP is accredited as a Museum Collection through the American Alliance of Museums, and must maintain certain aspects of their plant collection to continue to be accredited. An accredited museum collection is not a term typically applied to a botanical preserve; thus this fact has the power to grab attention and alter a visitor's perception of what is contained in the Preserve. It also supports the goal of conserving native plant species, just as a history museum conserves artifacts.

PL-12: The Preserve uses herbicides to help eliminate invasives. This creates an apparent conflict between what BHWP does and what it believes, so it must be addressed within the interpretive program. At the same time, it does provide an opportunity to focus on the impact of invasives, and the role of humans in introducing invasives to the area.

PL-13: The Preserve is a part of Washington Crossing Historic Park, which creates some issues when trying to fund raise or engage in other activities. This is not an issue that the Interpretive Plan can address, but it does affect such suggestions as building a new Visitor Center into the meadow, along what is now the exit road, so the relationship and what BHWP can and cannot do needs to be clarified as soon as possible.

PL-14: By policy, weddings are entitled to use of the Pond area, picnic pavilion, the restrooms in the meadow and the parking in the meadow. This limits the experience for people visiting at the same time as a wedding. This is especially an issue for families with children because the Pond area and meadow are the only places children can be more 'feral.'

PL-15: The moss garden with its bench was donated so the bench cannot be moved, and there is no existing access from the primary trail to the bench. Consider putting in a stepping-stone trail connecting the bench to the primary trail to avoid trampling of the moss garden.

PL-16: The Rot Plot is an eyesore, but it is used for programs. Consideration should be given to moving this feature or cleaning up the area.

Existing Information and Interpretive/Educational Opportunities

EI-1: The following opportunities are currently available at the Preserve:

- Penn's Woods Tree Trail (brochure) and Leaf Bingo
- Pennsylvania Native Ferns (brochure)
- Visitor Guide and Map (publication)
- Guided walks that cover a number of subjects regarding native plants and associated fauna, such as bird walks
- Interpretive and educational programs
- Exhibits in the basement of the Visitor Center
- Interpretive panels associated with the bird viewing platform
- A variety of interpretive and educational exhibits in the main room of the Visitor Center
- Seasonal Bloom List
- The Green Labyrinth
- Rot Plot
- Penn's Woods Passports

To the extent possible, existing opportunities should be incorporated into the interpretive network, either as they are, or with modifications that create opportunities in line with the themes and goals.

- **EI-2: The main room contains indoor exhibits.** Because of use of the main room for programs and other functions, these are not always accessible to the general public.
- **EI-3:** The Platt Collection is in the basement of the Visitor Center. It is likely that most visitors are not aware of the Collection, and even if they are, access is sometimes an issue due to programs taking place in the main room.
- **EI-4:** The Preserve has developed bird viewing areas outside the windows in the primary space within the Visitor Center. This creates a good opportunity to focus on the story of the connection between birds and wildlife, and native plants. However, this space is not available when the room is being used for programs.
- EI-5: The Preserve has Family Discovery Backpacks a Discovery Trail Backpack for ages 7 and up and a Butterfly Walk Backpack for ages 4 and up. The interpretive network should create more opportunities, if possible, that utilize items in the backpack.

Safety

- SF-1: The parking area for the Visitor Center does not have designated pedestrian walkways, resulting in people walking through the lot (and on the road) to reach the Visitor Center. The plan should address the desire to separate pedestrians and motorized vehicles to the extent possible.
- **SF-2: Many of the routes to explore the Preserve require walking on active roadways.** The plan should address this issue.
- **SF-3: Pidcock Creek is easily accessible.** Water safety information should be communicated to all visitors.
- SF-4: Some of the trails on the Preserve contain sections with steep slopes, which are potentially an issue at any time, but especially when the ground is wet or muddy. Consideration should be given to re-routing, or upgrading trails to avoid requiring visitors to navigate steep slopes.
- **SF-5:** The site contains poison ivy, ticks and other environmental hazards. Visitors should be made aware of these hazards at the beginning of their on-site experience, and possibly before they visit (using the web site and other outreach opportunities) so they arrive with proper clothing and footwear.
- SF-6: Wet weather combined with sloping ground and bare ground create conditions where a visitor's shoes are likely to get muddy. This is a safety issue while on the grounds and when they access the building.
- SF-7: There is some concern regarding potential issues if a medical emergency was to occur at the Pavilion. Cell reception is poor and it would take time for staff to respond.

Potentially Complementary/Competing Opportunities

- PCO-1: Washington Crossing Historic Park can be a complementary experience of an interpretive opportunity focused on use of plants for medicines. An effort should be made to develop complementary opportunities to take advantage of reciprocal selling.
- PCO-2: Mt. Cuba Garden Center in Delaware also focuses on native plants, although the ecoregion is different, so they could be a complementary experience.
- **PCO-3: Honey Hollow (Bucks County Audubon).** The focus is on birds, but the concept of native birds needing native habitat is complementary to the messaging at the Preserve.

PCO-4: Other potentially complementary opportunities include the following:

- Bartram Gardens
- Bucks Beautiful
- Bucks County Farm and Garden
- Peace Valley Nature Center
- Silver Lake Nature Center
- Churchville Nature Center

Resource Protection

- RP-1: Specimens in the exhibits in the basement of the Visitor Center require environmentally controlled spaces for display. This must be factored in when developing the new plan.
- RP-2: The Preserve currently has issues with visitors walking off the trails, picking wildflowers and pulling up plants. To the extent possible, this should be addressed in the plan.
- **RP-3:** The Preserve has to keep deer out in order to maintain its collection of native plants. This needs to be communicated, especially because the deer fence is highly visible in areas.
- **RP-4:** The Pond area and the trail between the Pond and the Visitor Center are overused. The interpretive network should be cautious about creating opportunities that would increase usage of this area and this trail.
- **RP-5:** The area has a carrying capacity in regards to people, although that number has not been determined. Unlimited visitation is not an option, so care must be taken to focus on priority audiences.

Other

- **O-1:** All orientation and wayfinding information –both fixed and non-fixed are in English. If the Preserve wants to attract audiences that speak other languages it may need to develop basic orientation, wayfinding and interpretive information in other languages.
- **O-2: The Preserve holds plant sales every day from April November that are well attended.** This creates a great opportunity to provide associated interpretation.
- O-3: Washington Crossing Historic Park is considering a bike trail connecting the lower and upper sections of the park. The Preserve could be an added stop for those traveling by bicycle.
- O-4: The Preserve contains part of the mill race and the associated dam for the grist mill associated with the Thompson-Neely Household.
- **O-5: The site has spotty cell phone coverage.** This limits the use of interpretive opportunities that involve the use of a cell phone, such as an App.
- **O-6: The name of the site causes some confusion and issues.** People come at all times of the year expecting wildflowers without understanding that they do not bloom all year. They also may expect access to Bowman's Tower. To the extent possible, these potential issues should be addressed prior to a person coming in order to set the correct expectations.
- O-7: The unique nature of BHWP and the abundance of gardens in the area lead to people thinking this is a more formal garden, and/or that this is a nature center. This creates an issue because people's expectations do not match reality. The interpretive program should include strategies to create a more accurate expectation.

- O-8: Issues with crowding during events and when specific seasonal phenomena occur, such as when bluebells are in bloom.
- O-9: The Preserve contains the 'Green Labyrinth,' a feature that people want to see when they arrive. The orientation and wayfinding network should be clear on how to find this feature.
- O-10: The Preserve currently has issues collecting fees from visitors.
- **O-11:** Limited carrying capacity makes it difficult to create opportunities for school groups. In terms of on-site opportunities, this may not change because serving school groups is likely to require some significant additions to the infrastructure. However, this group could be reached with Outreach strategies.
- O-12: It is important to avoid having interpretive opportunities detract from the character of the Preserve.
- O-13: Noise from the fan in the greenhouse detracts from the potential of using the area around the cabin for interpretive opportunities having an audio component.
- O-14: Visitation is too inconsistent to justify a full-time shuttle, or probably a full-time person at a Gatehouse should one be constructed.
- O-15: The 'Nature's Garden' sign in the plant sale area is out of date because the 'new paths' it notes are no longer new. It should be removed or replaced.

Appendix D: Inventory of Potential Stories

Introduction

The Visitor Interpretive Experience Planning Process includes selecting themes (messages) that will, if understood by the visitor, have the potential to cause a change in knowledge leading to an impact on behavior that is consistent with the BHWP goals. Stories are the vehicles for communicating the themes, and the features of the Preserve are the key 'props' for telling those stories because people generally become more interested in a story when they can see something related to it, and they are more likely to believe what they see than what they only hear or read. Therefore, the more an interpretive opportunity connects with and uses actual artifacts, specimens, features and other sensory stimuli in conveying information, the more effective the opportunity will be. With that in mind, the inventory of potential stories within the context of Visitor Interpretive Experience Planning is focused on identifying sensory stimuli as a means of determining what stories can be told most effectively.

The following table contains some of the prominent features and stories that could be told using that feature. It does not include any of the specific plants or plant communities (yet). Rather than listing all the plants and plant communities, a better approach is likely to be to start with the messages and work with resource specialists to identify specific stories that will be effective in communicating those messages, and what plants and plant communities should be used.

Features and Associated Stories (in general priority order)

eatures and Associated Stories (in general priority order)			
Feature(s)	Associated stories and comments		
Preserve as a whole	 Connections among the land, water, plants and people 		
	 Conservation in PA (Penn's Woods had the first memorial 		
	tree planting in PA)		
	 Spiritual connections between humans and plants 		
Plants along the medicinal trail	Connections between plants and health		
Variety of habitats and	 Adaptation of plants to specific habitats, which is a key for 		
associated native plants	understanding what can and cannot be planted in specific		
including the variety of plant	habitats. (Right plant – right place)		
communities in the different	 Other plants as important parts of the habitat required by 		
habitats of the Preserve	a specific plant.		
Variety of habitats visible along	 This is a good place to tell a succession story. 		
the Penn's Woods trail.			
Signs in trees along Penn's	 How policies change based on evolution of knowledge 		
Woods trail	(needs to include the answer to the question of why they		
	haven't been removed).		
Meadows through which the	 Contrast between meadow and forested area in terms of 		
visitor passes to reach the site	what native plants and wildlife each can support.		
	 Importance of ecotones (edge where two ecosystems 		
	meet) in supporting some species of wildlife.		
	 Human impact on native plants and natural ecosystems (if 		
	meadow was originally cleared to grow grain).		
	The value of meadows compared to sterile lawns		

Any evidence of a species of wildlife using a native plant (includes 5-6 species of swallowtail with associated host plants)	 Importance of native plants in supporting native birds and wildlife. It helps support the message that 'managing wildlife is all about managing habitat.' Evidence includes such features as woodpecker holes, plants with berries, etc.
Native plant nursery	 Why we need to propagate and distribute native plants. How people can propagate their plants in small greenhouses / nurseries in their own yards.
Oaks and insects	 Anchor plants and their importance as climate changes due to ability to support a diverse array of organisms.
Geology	 Importance of substrate as part of habitat
Bowman's Hill	 Contains habitats not currently found in the Preserve, so if BHWP could manage that area, it could expand its living collection of native plant species. (May make better use of the area without taking over management of the Tower.) Unique Geology
Visitor Center Evolution	Impact that individual people can have
Bird feeders / Observation Area	 Importance of supplementing food available from native plants to support populations of native birds and wildlife. Connection between habitat and wildlife.
	 Adding bird feeders to a yard is an easy action for visitors.
Pidcock Creek	 Importance of maintaining water quality in the upper part of the watershed to ensure good water quality by the time the Creek reaches the Preserve. Riparian and aquatic habitats as key parts of the habitat for a wide variety of birds and wildlife.
Deer Fence	Protecting the native plants from deer
Bird houses	 Importance of supplementing nesting areas to support populations of native birds. The importance of understanding the birds in a particular habitat so the bird houses have the correct characteristics to support those birds (current placement of bird houses does not match the birds found in the habitat). Putting up bird houses is an easy action for visitors.
Chestnut used in old cabin	Changes in plant availability based in part on use
enestriat asea in ola cabili	Cultural History
Historic house	WPA / CCC
Historic bridge	WPA / CCC
Raceway for mill	Importance of waterpower to early EuroAmericans.
Grist Mill	 Early EuroAmerican history in the area. Importance of waterpower in early EuroAmerican history. Importance of flour to early EuroAmerican settlers.
Bowman's Hill Tower	
DOMINALI 2 UNI 10MEL	WPA / CCC

Appendix E: Input on Themes

The following information was collected by asking participants in the first work session to use one or both of the following sentence to determine topics and associated messages (themes) that they considered important to communicate.

After learning about	(topic)	, I want people to know that
(message)		

After experiencing $\ensuremath{\mathbf{BHWP}}$ (topic), I want people to know that

(message)_____.

Topic	Message	
BHWP	Their actions at home have impacts on the environment	
BHWP	Native plants support our local ecosystem	
Butterfly bush (or any	They should chop theirs down and plant milkweed (or any native)	
invasive)		
Native plant nursery	Native plants will work in their home garden	
BHWP	Deer are a huge ecological problem	
BHWP	Their support for us or the environment in general is critical for all of our futures	
BHWP	Resource management is necessary for conservation efforts (deer fence, herbicide spraying, etc.)	
BHWP	They now have a knowledge base to support native plantings in their communities	
Monarch butterflies	They can support the insect by planting native milkweed	
BHWP meadows	Meadows are an important habitat. Compare to sterile lawns.	
BHWP	We are a unique sanctuary for native plants and an important repository	
Native Plants	Native plants support native birds and insects	
Native plants	Native plants in a home landscape can make a difference	
BHWP history	Volunteers can make a difference to the future	
Penn's Woods	Restoration efforts can make a difference to biodiversity	
Spring ephemerals	Spring ephemerals are connected to larger lifecycles of plant communities	
Founder's Pond		
Medicinal trail	Native plants were integral to life of people for millennia. Make the	
	People connection.	
BHWP Collections	Practices of wildflower museums evolve over time	
Nursery	Why Provenance matters / biodiversity	
BHWP Special place	Nature experiences are critical for all people	
Native indigenous plants	Planting native plants, local to your areas, is a matter of the greatest importance	
	It's natural for us to have strong attachments to plants we've grown up with or grow for a long time, such as hybrid roses; but once you've seen	

	the bees and other pollinators visiting a native plant, you'll see that it's profoundly gratifying (and aesthetically satisfying) to build a garden designed around providing nutrition, habitat and shelter to wildlife yearround.	
	It's not being a good neighbor to have a lawn free of clover, violets, spring beauties, blue-eyed grass or other wildflowers. That 'cropped meadow' approach to your lawn transforms it from a useless desert to an important natural resource. And grass seed manufacturers used to include clover seed in bags of grass seed – until they also started to manufacture broad-leaved weed killer.	
	Certain insects and other animals interact with a few specific plants, e.g., the monarch butterfly with the milkweed. Ruby-throated hummingbird with (????) columbine (in early spring). If that plant is threatened, so are the animals dependent on it.	
Our founders	Many people came together to preserve this special place – visionaries helped preserve this unique habitat	
Geology	Underlying rocks/geology shaped the landscape and the plants it supports.	
Penn's Woods	Trees support more than meets the eye (there's more to trees than meets the eye)	
BHWP	Native plants benefit us all	
BHWP	Nature is just what the doctor prescribed	
End of season	Fallen leaves are food for next year's flowers	
Native plants	What you plant, matters	
BHWP	They can make a difference by installing native plants	
Nativo plants	They are import to all life (the web of life)	
Native plants	They are import to all life (the web of life)	
	Pollinators are supported by native plants and are critical	
	Support birds than control insects and spread seeds	
The bridge and cabin	Are best – adapted to the local growing conditions The history of the preserve and why we were established is still relevant today	
Penn's Woods	An understory is important	
Pidcock Creek	We have a unique geology that supports this great variety of native plants.	
Fireflies	There are coveral different species here and each has distinct fleely	
rii eiiies	There are several different species here and each has distinct fleck patterns (not a priority story)	
Wildflowers	The insects that pollinate them have specific strategies to maximize success	
Naturalist training	They will leave with a better understanding between native plants and a	
program	healthy ecosystem	
-	They have the base knowledge needed to deliver programs	
	There is always more to learn and that is a good thing	
All programs	We are a non-profit with significant member support. We have a relationship with DCNR that helps with maintenance.	

All programs	BHWP is a resource they can tap into for more information, support and materials
A specific place such as Audubon Trail	You can enjoy many other lovely spots at the Preserve
Invasive species	You can help preserve native plants in your own backyard by removing invasive species at home
Native plants	You can go buy some at our native plant nursery – we are committed to encouraging people to plant and purchase native plants.
Conservation importance	You can become a member and support the preserve as well as plant native plants at home
Our mission	We work hard every day to preserve native plants and our natural world — and they can as well by volunteering (benefits of membership)
Native plants	They can be stewards for conservation by spreading the work about our preserve and making changes in their own lives to ensure a bright future for all species on our planet.
Our many ecosystems and unique environments	They can take classes or attend a lecture series to learn more about these topics.
What's a native plant?	They co-evolve with native fauna and have adaptations that fit their habitat.
Miles and making along	
Why are native plants important?	They support native wildlife
	It's a group of native plants that form an ecosystem
important? What is a native plant	
important? What is a native plant community?	It's a group of native plants that form an ecosystem Support pollinators and need pollination for their support. Without native plants, pollinators and native plants would decline. Native
important? What is a native plant community?	It's a group of native plants that form an ecosystem Support pollinators and need pollination for their support. Without native plants, pollinators and native plants would decline. Native wildlife will also. Define our local native heritage – without native plants, regions lose
important? What is a native plant community?	It's a group of native plants that form an ecosystem Support pollinators and need pollination for their support. Without native plants, pollinators and native plants would decline. Native wildlife will also. Define our local native heritage – without native plants, regions lose their unique qualities We learn and benefit from observation when we focus on our natives – we learn and observe anywhere because our natives are abundant /

Appendix F: Input on Impacts and Outcomes

The following information was collected by asking participants in the first work session to use the following sentence to determine topics and associated messages (themes) that they considered important to communicate.

As a result of experiencing Bowmar	n Hill Wildflower	Preserve and/or its interpretive	e opportunities,
(target audience) will/will not	<u>(do what?</u>	The result will be	(impact
on the resource or entity in charge)		<u>.</u>	

Audience	Do what?	Result (Impact)
Adults and children	Not disturb, pull up or trample	Realization of their importance
	plants	and place in natural world.
Adults and children	Not squash or kill insects	Same as above
Adults / teens	Stop, look and listen to the natural	Benefits of nature relative to
	world (peace)	well-being and general health
Adults	Learn about native plants	Conservation and stewardship
Children	Enjoy discovering [the natural world]	Love of nature from youth
Teens	Enjoy outdoor activity	Health and wellness and
		education
Families	Experience nature in a new way	They come back again and again
	via our diverse ecosystems	
Adults	Connect with a specific spot in the	Become a member or donor
	preserve	with interest in conservation.
Home gardeners	Not plant invasives (non-natives?)	Healthier environment
Home gardeners /	Plant native plants	Healthier environment
landscape designers – planners		
All	Appreciate the [natural]	Healthier environment
	environment and vote	
All	Donate their time / money to any	Healthier environment
	environmental organization	
All	Tell others about BHWP and	Spread our message
	native plants	
Dog owners	Not bring their dog	Healthier preserve
Schools / community	Be inspired to start a native plant	Healthier environment
groups	nursery	
Adults visiting the	Increase plantings of native plants	Increase in plantings of native
Preserve	(Buy ours!)	plants

Children visiting preserve	Start to avoid exotics and replace with native plants (even if just a plant pot or window box of milkweed)	Increase plantings of native plants
Gardeners	Tolerate "delicate lacy effect' on leaves of garden/yard plants = herbivory, for that's a sign of biodiversity on property	Greater biodiversity throughout yards of America – a ribbon of respite from the toxicity – for bees, all beneficial insects, birds
Lawn enthusiasts	Do not use insecticides – especially systematic (neonicotinoids)	A reduction in decline of birds and bees, etc.
	Do not use broadleaf weed killers on lawn or in flower beds	A reduction of toxins in the country as a whole.
General / all	Not trample plants (go off trail)	Protect flora and fauna (critical
•	, ,	habitat)
General	Understand importance of NP [native plants]	Buy native plants
General	Learn about cultural history	Know faces behind BHWP? Donate / with in-kind
Kids / families	Explore nature	Become members / bring new audience
Schools / scouts	Explore nature	Promote preserve as an education destination
Tour Groups	See value in native plants	Buy [native] plants / educate others
Birders	See connection between native plants and birds	Buy / plant native [plants]
First time visitors / Group-ons	Appreciate value of nature	Make return visit / sign up for programs
0.004		
2 PM walk participants	Understand the important of native plants as the foundation of a healthy ecosystem	Purchase native plants for their home landscape (preferably from us)
Naturalist training	Represent the preserve and help spread the mission	Reach broader audience
School groups	Plant the seed for future generation to protect natural areas	Corral their parents to support our mission
Casual visitor	Be inspired by the natural beauty in the balance	Stay on the trail
Elected officials	Learn about what we do and understand how crucial our	Support us financially and go to bat for us in the community

	mission is to the health of this	
	environment	
All	Come to BHWP - Buy our plants	Introduce native plants regionally
Scouts	Attend scout program here	Learn more about importance of native plants
Naturalist trainees	Attend training and other educational programs	Continue to learn and share knowledge and support BHWP mission
Children	Attend program or self-guided experience	Contin to observe nature, plants, flowers
Homeowners	Attend programs and buy plants	Transition their landscape to more natives and understand why
Landscape architects	Come here, attend programs	Use more native plants in their projects and inform their clients
Underserved people	Come here, attend programs	Feel comfortable, observe more, return, buy plants
Teachers	Come here, attend programs, buy plants, bring schools	Use new knowledge in classrooms, outdoors, introduce native plants to students
All	Come here, attend programs, bring friends	
Birders		Learn about native plants importance with friends and family
First time group or visitor	Recognize value of preserve, enjoy [experience], come back	Increase in visitation
Traditional garden club	Plant natives, come back	By plants
Native plants newbie	Come back, take classes	[become] members, volunteer
Naturalist	Recognize diversity	Word-of-mouth (social selling), reputation
Landscape gardeners	Learn importance	Incorporate native plants in design
Special needs	Experience benefits of nature	Come back
History interest	Appreciate value of conservation volunteers	Make change in world
All		Understand importance of natural environment Protect natural environment

Uninitiated /	Feel comfortable, feel curious	Interested to come back
Groupon		
Special needs	"forest bathe"	Feel calm and connected
1 st time, initiated	Go on group tours	Learn
"group player		
1 st time, initiated	Solo roving naturalist	Explore
"solo explorer"		
Nursery buyers	Buy appropriate plants and learn	Be successful and come back for
	why	more plant courses
Gala visitors	Donate money	See tangible results to
		community they have targeted
Naturalists	Continued learning experience	Desire to impart knowledge and
		passion to others about mission
		and place (BHWP)
"Connected" visitors	Become members and/or	Extend BHWP's reach to change
	volunteer and/or donate	behavior
Volunteers	Understand the mission and the	Extend the work force to
	parts available to them for to play	achieve mission and goals
	at BHWP	
Dog [owners]	Understand why 'no'	Come back again without their
		dog
Enter without paying	Come and pay	Understand the value to
		support
Knowledge of 'expert'	Connect a Naturalist, written info,	
visitors	guidebooks in shop	

Appendix G: Definitions

Understanding the following terms will be useful in understanding this document:

- Visitor Interpretive Experience Plan
- Visitors
- Barriers to Engagement (Barriers)
- Stepping Stones of Engagement
- Native Nature

Visitor Interpretive Experience Plan

Up until very recently, an 'Interpretive Plan' was the document that was typically produced to guide development of an Interpretive Program, which includes all the exhibits, interpretive panels, publications and similar interpretive opportunities for a site or facility. While such plans can identify opportunities that communicate desired messages to target audiences, they often fail because they do not take into consideration the experiential context in which they must function.

Most good interpretive planning models used today reflect the need to take target audience, goals and objectives, constraints, opportunities, and themes into account when selecting information delivery strategies and content. However, they still treat the array of strategies – the Interpretive Program as a whole – as the focal point of the plan. Although any interpretive planning effort should result in identifying the array of interpretive opportunities to develop, the approach should be to first identify the ideal visitor experiences (ones that by their nature would benefit from effective interpretive opportunities) from the perspective of those developing the interpretive program, and then use those experiences to determine what interpretive and other information to offer. Such experiences also must be ones that target audience are willing to buy with their time, which requires knowing your target audiences beyond basic demographic information. Using the visitor experience approach ensures that you develop a plan, labeled a 'Visitor Interpretive Experience Plan, for a complete information network that begins with reaching your target audiences where they are - physically, emotionally and intellectually – and taking them where you want them to go by using a linked combination of trip planning information, orientation, wayfinding and interpretive opportunities. It also ensures that you identify barriers to the desired experiences, such as facilities that aren't fully accessible, so you can address those barriers within the context of developing your interpretive program.

In sum, people today buy *experiences*. Consequently, the product to guide development of an interpretive program is a Visitor Interpretive *Experience* Plan (VIEP), which uses desired audience experiences as the frameworks for determining the interpretive, outreach, orientation, wayfinding, and trip planning information to develop, and actions to take to facilitate experiences that will attract, hold and communicate effectively with target audiences, whether on or off-site.

Visitors

The goal of the network of interpretive opportunities is to forge emotional/intellectual connections between a member of a target audience and the natural world in general and BHWP specifically. Although a visit might be the most effective vehicle for creating such connections, it is not the only one. In other words, people don't have to physically step foot on the site to be termed a 'visitor.' The term

'visitor' in this document is applied to anyone engaging with an interpretive opportunity that is a part of the network of interpretive opportunities being developed for BHWP, such as engaging with an Introductory Video on the website. This is especially relevant because BHWP aspires to be the 'go to' place in the Mid-Atlantic region for information on growing and using native plants, which means that some of the audiences they want to serve will find it difficult to visit the site.

Barriers to Engagement

The typical approach to modifying visitor behavior in regard to conservation is to focus on changing attitudes toward conservation with the expectation that behavior will then be modified to be consistent with attitudes. This is more likely to work with children because their attitudes are still being shaped. However, by itself, this approach can fail for many reasons, the most common being barriers to engaging in the desired behavior. With that in mind, it is important for BHWP to look not only at opportunities for education – through interpretation, environmental education and public outreach – but also at the barriers to engaging in desired behaviors with the intent of eliminating or minimizing those barriers. Examples of barriers include lack of transportation to the site and discomfort with / fear of Native Nature, the latter becoming more common as we get more urbanized.

Stepping Stones of Engagement

A term used by the US Fish & Wildlife Service that is highly applicable to the approach we use is 'Stepping Stones of Engagement.' They use it to describe their approach to connecting people with Native Nature, which is to help them move along a series of experiences that begin with their existing relationship with nature to a relationship with the type of nature they manage. The implication of a 'progression' is apt in that the ideal outcome is for all members of target audiences to become fully engaged in conserving natural resources, a goal that requires a progressive series of commitments, each a step beyond the other. However, the term is a misnomer in that it implies a linear pathway of steps with specific starting and ending points.

In reality, Stepping Stones of Engagement includes an array of opportunities that constitute potential starting points to expose target audiences to nature, wildlife, and conservation. By necessity, these 'starting Stepping Stones' are in places – physical or digital – in which the target audience is already present. Ideally, the first Stepping Stone should be something that is already a comfortable part of everyday life. Most people have some existing relationship with nature, such as having house plants, or a backyard garden. Those existing relationships should be the starting place for Stepping Stones of Engagement, which requires that their nature be considered valid. The discussion won't proceed very far if it begins with an intimation that only the nature that BHWP wants to conserve constitutes real nature. The approach of starting where the audience is currently located reflects a commitment to meet people where they are, while also reflecting a key principal in this process, which is to minimize the effort required and barriers that must be surmounted for a person to begin engaging with nature and/or conservation. Each Stepping Stone provides an experience with nature in some way. As a whole, 'starting Stepping Stones' offer potential visitors an array of opportunities to experience nature, so everyone has an opportunity to interact with and experience nature in a way that they consider 'safe' and within his or her comfort zone. For some it may be a visit to BHWP, but for others it may be a virtual experience on the Internet or some other option that does not involve a visit.

Each Stepping Stone not only provides an opportunity to experience nature at a specific level, but also seeks to move a visitor along the journey to becoming fully engaged in conserving natural resources. Consequently, all 'starting Stepping Stones' are linked to myriad potential 'follow-up Stepping Stones,' and from those to other Stepping Stones of Engagement in what is hoped is an endless journey of engagement and associated commitment to conservation that takes the form of actions.

The keys to an effective array of Stepping Stones of Engagement include the following:

- 1. Validate whatever relationship the target audience currently has with nature, in this case plants, that they consider a part of their quality of life. This could range from a completely natural environment to house plants, a backyard garden, bird feeder, a neighborhood park, and other examples of nature that is managed in some way.
- 2. Provide easily accessible "next Stepping Stones' in locations already frequented by the target audiences, which are probably within their community, with the goal of deepening their connection to nature.
- 3. Ensure that each Stepping Stone offers high benefit to the target audience for the cost of time, attention and other personal resources as defined by the target market. This is especially important for the starting Stepping Stones.
- 4. Ensure that the 'distance' between Stepping Stones is such that a person can take 'baby steps' of commitment to conservation.
- 5. Ensure that each Stepping Stone markets potential next Stepping Stones.

Native Nature

Everyone has a connection with nature since they breathe air, drink water and eat food, all of which are linked to our natural world. Most people already have a relationship and value this type of nature in some way, but the nature they value may be non-native house plants or non-native vegetation in their yards. To avoid distinguishing 'good' nature from 'bad' nature, which may not work well with target audiences, the term 'Native Nature' is used to differentiate native flora and fauna from other 'nature.' It is Native Nature that BHWP wants people to restore, protect and conserve.

Appendix H: Cost Range Estimates

The following are Cost Range Estimates for some of the interpretive strategies recommended in this plan. Actions involving modification or building of infrastructure are quite difficult to estimate without a more detailed design on which to base the estimate, so the range is quite large. In addition, costs for such items can be very low if the materials are donated and labor supplied by volunteers, which is the ideal for the small Welcome Center and the Gatehouse.

Note: The Cost Range Estimates try to cover the middle range of costs. In almost all cases you can pay more or less for the strategy in question.

Summary of Strategies for Bowman's Hill Wildflower Preserve

Strategy	Cost Range	Comments
Website modification	See Comment	Assume this will be done in-house
Road signs	\$250-\$500 per sign. Less if	This includes the Access Road Directional Sign, Pedestrian Crossing Signs, Do Not Enter Signs,
	ordered in	Speed Limit signs, Parking Entry signs, Right Turn
	quantity	Only signs, No Parking on Roadway Signs
Visitor Center Directional Signpost	\$1000-\$2000	omy eight annuagement and any eight
Welcome Kiosk	\$4000-\$8000	Much less if you build it yourself. Then the cost is probably just materials, although you will need some type of design.
Personnel Resource Book	See Comment	Assume this will be developed in-house
Site Orientation Panel	\$1500-\$3000	Assuming you have access to existing artwork for the map
Gatehouse/Entry Booth	See Comment	This structure must be 4-sided and to a certain extent, weatherproof. It may require more work than the Welcome Kiosk. You can get a prefab one on-line for \$10,000 but would still need to install it. I suspect you have volunteers who could construct this.
Native Habitat for Native Birds and Wildlife Interpretive Panels (3-4 panels, vertical next to windows)	\$2,500 and \$7,500 per sign.	These are likely to be a non-standard shape and may require a mounting system so the range is somewhat large.
Thematic Overview Exhibits	See Comment	Range is too great for a figure to have much meaning. If they are digital and interactive, the cost could be as much as \$100,000. If they are very simple, it could be as little as \$25,000 (assuming a long linear set of exhibits that ran the entire length of the storage bins.
Explorer's Guide to Bowman's Hill Wildflower Preserve	See Comment	Publications too difficult to determine cost range estimates because of significant variability due to size, color, pages, binding, number ordered, etc.

Explorer's Application (App) to	\$150,000 -	An Application of the type recommended here is
Bowman's Hill Wildflower	\$300,000	likely to cost a significant amount of money
Preserve		because of the size of the site and the array of
		elements to be included, such as Augmented
		Reality, podcasts and vodcasts.
Sense-ational Discovery Guide	See Comment	Publications too difficult to determine cost range
		estimates because of significant variability due to
		size, color, pages, binding, number ordered, etc.
Demonstration Garden	\$2500-\$5000	
Identification sign and	/interpretive	
Demonstration Garden	panel. ID sign	
interpretive panels (3)	minimal cost	
Specialty Garden Kits	See Comment	Assume these will be made in-house
Plant Sale Entryway Sign and	See Comment	Needs to be design
structure		
Natural Landscapes Idea Book	See Comment	Assume this can be made in-house, with a possible
		additional cost for laminating pages
Natural Landscapes	See Comment	Assume these will be made in-house
Information Packets		
Penn's Woods Interpretive	\$2500-\$5000	
Trail (6 with interpretive	/interpretive	
panels)	panel.	
Pond Interpretive Trail (5	\$2500-\$5000	
interpretive panels)	/interpretive	
	panel.	
Conservation Thematic	\$2500-\$5000	
Overview Interpretive Panels	/interpretive	
(3 panels)	panel.	
Trail directional signposts	\$250 to \$400	
Trail Orientation and	\$1500-\$4000/	
Thematic Overview panels	panel	
(small)		
Electric Tram	\$35 - \$40,000	
Tour Guide training	See Comment	You could host a Certified Interpretive Guide
		Training by the National Association for
		Interpretation. Cost is variable depending on the
		instructor, expenses (you have to pay) and number
		of participants.
Composting toilet	See Comment	According to the Green Building Alliance,
		commercial composting toilets cost from \$1,500 to
		\$8,000 depending on the complexity of the system.