

Western Pennsylvania Conservancy



ALLEGHENY COUNTY PARKS ECOLOGICAL ASSESSMENT AND ACTION PLAN HARTWOOD ACRES PARK

Prepared for the Allegheny County Parks Foundation
January, 2019



FOREWORD

With nine parks encompassing over 12,000 acres, Allegheny County boasts one of the largest regional park systems in the country. While recreational activities make each park a unique destination, nature is the common thread that connects our parks and is our most treasured – and jeopardized – asset. The abundant resources found in our parks' forests, meadows and streams provide vital habitat for flora and fauna that clean our air and water, pollinate our plants and connect the web of life. We are stewards of these natural sanctuaries and are working to protect them for future generations.

In 2017, the Allegheny County Parks Foundation together with the Allegheny County Parks, partnered with the Western Pennsylvania Conservancy (WPC) to conduct an Ecological Assessment and Action Plan in Hartwood Acres Park. This study evaluates the park's natural resources and ecological assets and recommends an implementation plan for protecting, preserving and improving the environmental health of the park.

Hartwood Acres Park is a unique destination, originally designed as a private residence for a family of equestrians to replicate an English countryside manor. The Tudor-style Hartwood Mansion, a popular regional attraction, with stables, is surrounded by more than nine miles of trails for walking, hiking, cross-country skiing and horseback riding. Hartwood Acres was purchased from the Lawrence family by Allegheny County in 1969 and opened to the public in 1976.

The grounds offer a diverse ecosystem with a range of mature forests in good condition, forested areas with some ecological damage from invasive species and other areas substantially impacted by invasives. The challenges ahead are to protect the healthy areas against oak wilt, manage the spread of invasive species, and plant trees and shrubs in some open areas to encourage wildlife habitat and discourage additional invasive spreading.

WPC recommends converting several mowed areas to native meadows to provide a richer wildlife and pollinator habitat. The report suggests installing deer fencing to protect areas from extensive deer over browsing and creating a comprehensive trail development and management plan to protect tender native plants. WPC suggests adding interpretive signage to help educate and recruit the public to cooperate in the conservation of sensitive ecological areas.

We are deeply grateful to the Benedum Foundation and the Garden Club of Allegheny County for providing the funding to make this report possible. We also thank the outstanding staff at the Western Pennsylvania Conservancy and Allegheny County Parks for their expertise and insightful contributions to this report. We look forward to working with the County Parks staff and other partners to prioritize and implement these recommendations and to continue this important work in all of the Allegheny County Parks.

Caren Glotfelty
Executive Director
January 2019

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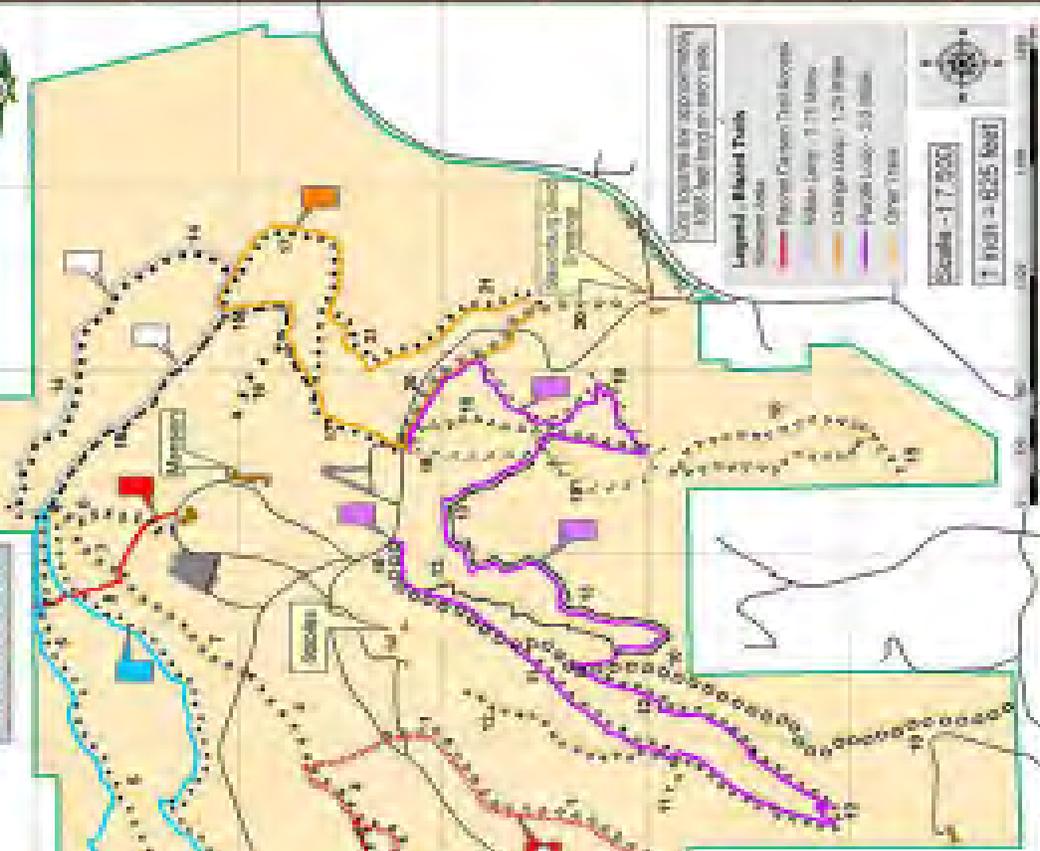
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Legend -
Named and Numbered Trails

1-10 Miles	1 - Hobbs Field
1-10 Miles	2 - Horner Connector
1-10 Miles	3 - Beverly Blvd
1-10 Miles	4 - Hobbs Junction
1-10 Miles	5 - North Trail
1-10 Miles	6 - Santa Anita
1-10 Miles	7 - Maple Trail
1-10 Miles	8 - Oak Trail
1-10 Miles	9 - Fox Run
1-10 Miles	10 - Ridge Run
1-10 Miles	11 - Showers Walk
1-10 Miles	12 - 20/20
1-10 Miles	13 - Riverside City Trail
1-10 Miles	14 - Loop at Night
1-10 Miles	15 - Gardens Trail
1-10 Miles	16 - Pine Trail
1-10 Miles	17 - Riverside Trail
1-10 Miles	18 - Peacock Trail
1-10 Miles	19 - Butler Connector
1-10 Miles	20 - Chalmers
1-10 Miles	21 - Chapter 200

Map of Hartwood Park
 The map shows a network of trails in various colors and styles, including named trails like 'Hobbs Field' and 'North Trail', and numbered trails. Landmarks such as 'Hobbs Field', 'Santa Anita', and 'Maple Trail' are labeled. A scale bar at the bottom indicates distances up to 1.00 mile. A north arrow is also present.

Hartwood Park Combined Map Blazed Trails & Named and Numbered Trails



EASTERN SECTION

WESTERN SECTION

Mobile Road Lot (used in Central Elementary School)

Blazed Trails

- Red Line - 1.75 Miles
- Blue Line - 1.75 Miles
- Green Line - 1.75 Miles
- Purple Line - 3.0 Miles
- Other Trails

Named and Numbered Trails

- 1-10 Miles
- 11-20 Miles
- 21-30 Miles
- 31-40 Miles
- 41-50 Miles
- 51-60 Miles
- 61-70 Miles
- 71-80 Miles
- 81-90 Miles
- 91-100 Miles

Scale - 1" = 100'
1" = 100' = 825 Feet

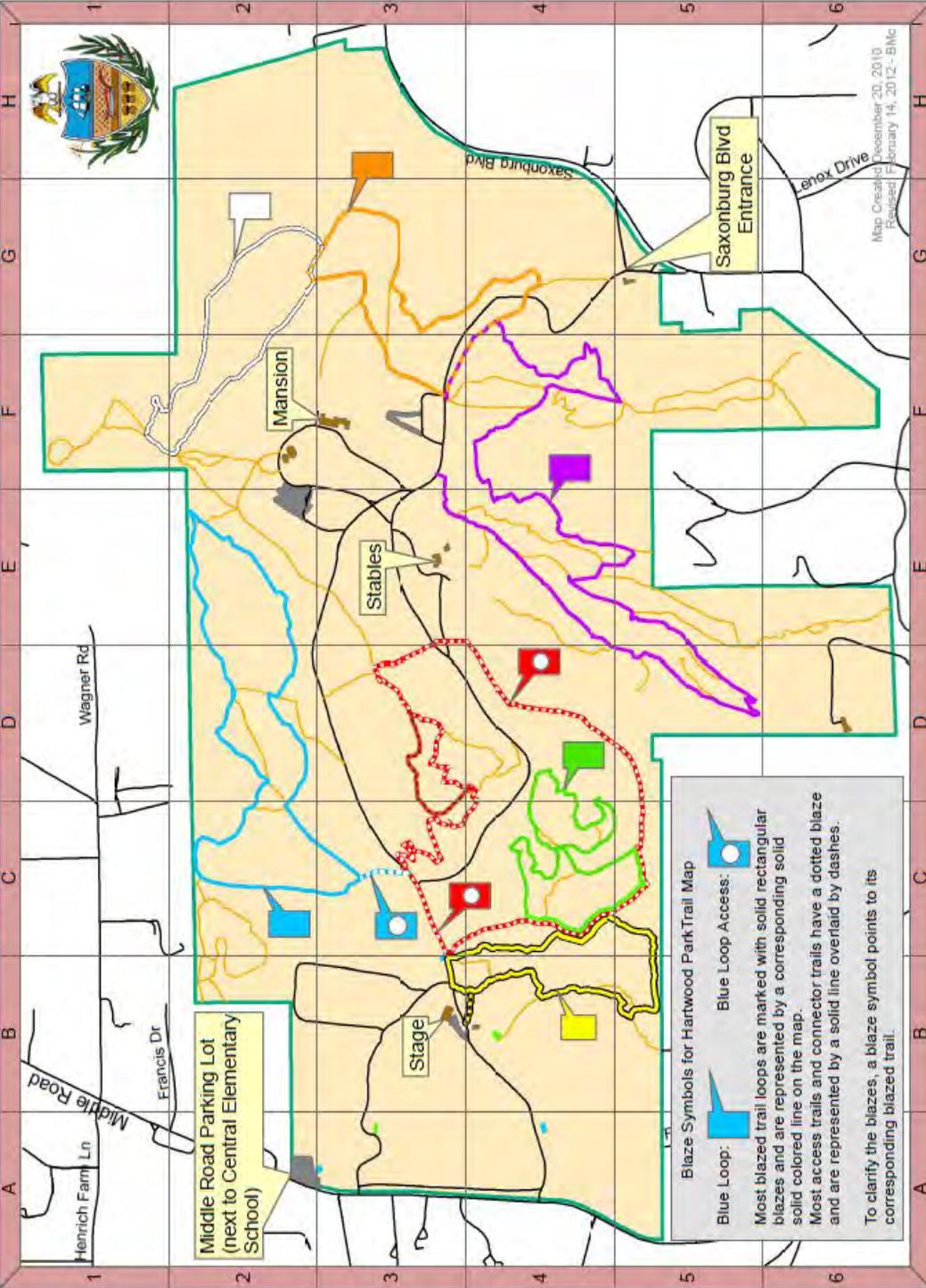
Legend - Blazed Trails

- Red Line - 1.75 Miles
- Blue Line - 1.75 Miles
- Green Line - 1.75 Miles
- Purple Line - 3.0 Miles
- Other Trails

Scale - 1" = 100'
1" = 100' = 825 Feet

Hartwood Acres Blazed Trails

Note:
The only park road open to public traffic (other than performance times) is the Saxonburg Blvd entrance which goes to the Mansion Parking Lot.
For Performance Area trails, use the Middle Rd Parking Lot (does not require park road for access).



Trail Legend - Performance Area

- Blue Loop Access
- Blue Loop
- Red Alternate
- Red Loop - 1.75 Miles
- Green Loop - 1.5 Miles
- Yellow Loop - 0.75 Miles
- Yellow Loop Access
- Other Trails
- Park Boundary

Blaze Symbols for Hartwood Park Trail Map

- Blue Loop Access
- Blue Loop

Most blazed trail loops are marked with solid rectangular blazes and are represented by a corresponding solid colored line on the map.
Most access trails and connector trails have a dotted blaze and are represented by a solid line overlaid by dashes.
To clarify the blazes, a blaze symbol points to its corresponding blazed trail.

Allegheny County
Division of Computer Services
Geographic Information Systems
621 County Office Building
502 Forbes Avenue
Pittsburgh, PA 15215
(412) 350-4760

Each side of a grid square is approximately 1065 feet long.

1:12,000

1 inch = 1,000 feet

0 330 660 1,320 1,980 2,640 Feet

Trail Legend - Mansion Area

- Orange Loop - 1.25 Miles
- Purple Loop - 2.0 Miles
- White Loop - 0.75 Miles
- Other Trails

Map Created December 20, 2010
Revised February 14, 2012 - Bllc

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INTRODUCTION

1.1 BACKGROUND

History of Hartwood Acres - Allegheny County Parks System

Originally home to John and Mary Flinn Lawrence, Mrs. Lawrence sold Hartwood Mansion and the adjacent property to the Allegheny County Parks Department in 1969, on the condition that she and her staff could live there until her passing. She died in 1974 and Hartwood Acres Park opened to the public in 1976. The mansion and its grounds were fashioned after a Tudor gothic-style architecture and inspired by an English country residence that Mrs. Lawrence and her husband visited in Oxfordshire, England. The mansion is one of Allegheny County's most popular tourist attractions, but the grounds of the park, largely wooded, also boasts a large outdoor amphitheater hosting many cultural events throughout the year as well as sculptures found throughout the park.

Hartwood Acres is one of the nine parks that comprise the Allegheny County Parks, a regional system that is managed by the Allegheny County Parks Department with legislative oversight by Allegheny County Council. Rich in recreational, natural, and historic resources and located within a 10 to 20 mile radius from downtown Pittsburgh, the nine parks - Boyce Park, Deer Lakes Park, Harrison Hills Park, Hartwood Acres Park, North Park, Round Hill Park, Settlers Cabin Park, South Park and White Oak Park - are meant to serve all of the communities and citizens of Allegheny County.

Allegheny County Parks Foundation

The Allegheny County Parks Foundation (ACPF) supports the improvement, preservation and restoration of nine county parks consisting of 12,000 acres strategically located throughout Allegheny County. The Parks Foundation assists in the transformation of these parks by assembling resources, improving assets, and mobilizing public and private stakeholders to advance strategies and aspirations to make the parks signature assets in Southwestern Pennsylvania.

“ACPF’s overall mission is to help improve, conserve, maintain, protect, preserve and restore park facilities and open spaces, and also to support educational, recreational, natural and cultural activities. These efforts all work to enhance the quality of life for county residents, promote healthy lifestyles, improve the environment, and stimulate economic growth and vibrancy for the region. In partnership with Allegheny County, ACPF strives to enhance the park experience for all users.

The Allegheny County Parks Foundation has commissioned this report to provide scientific and technical guidance for future enhancements of Hartwood Acres Park.

Western Pennsylvania Conservancy

The Western Pennsylvania Conservancy (WPC) is one of the oldest and largest environmental organizations in the state. It has helped establish many state parks through its land protection programs, it shepherds the state's database of rare and endangered species, it provides assistance to landowners and communities wishing to protect their watersheds, and is the caretaker of Fallingwater. Its community greening program provides technical assistance and programming to communities desiring to enhance their local quality of life through green strategies including community gardens, tree plantings, and green infrastructure projects. This project has combined expertise from the WPC's Community Gardens and Greenspace Program and the Natural Heritage Program.



Purpose of the Project

The purpose of this project is to provide information on the current ecological conditions and maintenance activities of Hartwood Acres Park and present prioritized recommendations for actions that will enhance the quality and function of the park and improve the park experience for all visitors. The last assessment of the environmental conditions of the county parks was conducted for the Allegheny County Parks Comprehensive Master Plan and was released in 2002. A tremendous amount of change has taken place in the region since then. Allegheny County has been undergoing a transformation of its economy and local environment. Significant changes in the landscape are occurring due to pests and diseases affecting trees, including oak wilt and the emerald ash borer which has killed almost all ash trees in the region. Climate change is affecting storm and weather patterns, growth and introduction of invasive plants and animals as well as air and water quality. In addition, scientific knowledge about how to manage ecological systems and stresses has changed and a new era has begun with the application of green infrastructure to solve issues related to stormwater, erosion, energy consumption and alternative transportation.

All of this change brings the Allegheny County Parks to an opportune moment to reassess conditions, identify needs and opportunities, and craft recommendations for improving the parks both as living ecological systems and as beloved spaces for the many citizens who use them each year. This is the third ecological assessment and recommendation document that the Western Pennsylvania Conservancy has provided for Allegheny County Parks Foundation; Boyce Park concluded in January 2016, South Park concluded in January 2017, and Settlers Cabin Park will be completed concurrent with this project.

1.2 PROFILE OF HARTWOOD ACRES

Hartwood Acres Park is located 10 miles north of Pittsburgh's downtown in both Hampton and Indiana Townships. Though never initially intended to be a park, the opportunity arose in the late 1960s when Mary Flinn Lawrence offered her home and property to Allegheny County at an



The Hartwood Acres Mansion

extremely affordable cost. Having been privately operated and well maintained for 40 years to replicate the English countryside, the property was well positioned to become a park almost immediately after transferring ownership.

The central draw of this park for many visitors is the Hartwood Mansion. The Tudor gothic style mansion, originally designed by Alfred Hopkins and constructed in 1929 for John and Mary Flinn Lawrence (whose father, William Flinn, constructed the Liberty Tunnels in Pittsburgh and Holland Tunnel connecting Jersey City to Lower Manhattan and who is the namesake of Route 8 - William Flinn Highway), boasts an impressive collection of English and American antiques and artifacts. The Lawrence's were equestrians, and there has been an active horse stable on the grounds which predates the mansion itself.



The Hartwood Acres Masion Gardens, located behind the Mansion Enterance

At 629 acres, it is one of the smallest parks in the Allegheny County parks system. Unlike other County parks, Hartwood Acres does not have any picnic groves or recreational or sports facilities. Yet the park does have more than nine miles of trails that are popular for walking, hiking, cross-country skiing and horseback riding.

Literature Cited

- Gangewere, R. Jay. July/August 1986. "Allegheny County Parks." Carnegie Magazine, Pittsburgh, PA
- United States History: Hartwood Mansion. Website: <http://www.u-s-history.com/pages/h3237.html>
- Interesting Pennsylvania and Beyond. 20 September 2016. Website: <http://www.interestingpennsylvania.com/2016/09/hartwood-acres.html>

1.3 ECOLOGICAL ASSESSMENT OF HARTWOOD ACRES METHODS

Team

The WPC team consisted of its community forestry staff including the community forester, director of community forestry, and outreach coordinator, as well as WPC's land protection specialist from the Land Conservation Program, two staff ecologists, and WPC's Natural Heritage Program science director.

Approach

The WPC team used aerial photographs to identify likely areas with forest cover. These photos were compared to older photos to identify locations that might have longer-term growth signifying potentially more ecologically significant locations. From these preliminary indications, the park was segmented into areas for further exploration. The field team included the WPC ecologists, community forester and outreach coordinator, and additional field staff. They visited the entire park and delineated sections and documented types of forest, types of understory vegetation or other features and conditions. WPC performed an Ecological Integrity Analysis by ranking each section of the park into four categories (Best, Good, Ok and Poor) based on their key environmental features. These features include seeps, rock outcrops, slopes and open areas. In addition, the team also used a customized Geographical Information System (GIS) data collection application to map five distinct management zones that were broken into 61 ecological units (EU) (see section 2.10). Existing conditions of each unit were documented, analyzed and inventoried.

Problems were noted including erosion, soil compaction, dangerous trees or overgrowth, and conflicts between users and ecosystem. A green infrastructure survey was also completed to identify the most strategic locations to apply green infrastructure to manage stormwater runoff and improve the park's ecological function, aesthetics and sustainability.

Intended Users

This report and accompanying set of maps, charts and resources is intended for use by the Allegheny County Parks Foundation and the Allegheny County Parks Department staff to protect and restore Hartwood Acres' Park's natural assets. The report is intended to facilitate project implementation and includes specific information on prioritizing projects and costs. The scientific information included in the report is intended for a general audience to provide useful and interesting information to the project partners and public alike.



WPC staff walk the trails of Hartwood Acres Park.