Trail Info for the Public Lessons Learned in Defining, Mapping, Naming & Blazing



Richard Kerr, Co-chair





Philadelphia Western Suburbs Trail Summit February 6, 2021

Breaking News! Trail Usage Soars!





Data Source: DVRPC

Oct. 124%

Nov. 182%

Dec. 162%

Breaking News! Trail Usage Soars!





Data Source: DVRPC

March-Dec. Monthly 97%-161%



Background



- 1. At the 2020 Trail Summit, attendees expressed the need for an online public info resource for area trails of all kinds.
- 2. I realized that with a little tweaking and a lot of expansion, www.havtrail.com could be adapted.
- 3. I could do it with my old Garmin GPS logger, lots of hiking and exploring, and learning how to use Google "My Maps."
- 4. Also in 2020, Haverford Parks & Rec wanted to update its trail information online, printed, signage, etc.
- 5. These are lessons learned from this past year's endeavor.

Lesson #1



Always keep in mind the apprehensive person who may be venturing out to a trail for the first time.

We are all beginners at some point.

Try to anticipate any concern or confusion, and address it up front in the information that you provide.

Defining a Trail



- As an object, a trail is a <u>line</u> (probably not straight) that connects two <u>endpoints</u> - a path between "A" to "B".
- It may be a loop, where "A" and "B" are the same point, or some combination of line and loop.
- Branches are difficult on Google "My Maps" - think of it like having to draw in one motion, without ever lifting the pen.



Mapping a Trail



- You usually can't map a trail by simply looking for it in an aerial photo. Most trails are well hidden under the tree canopy.
- 2. <u>Using a dedicated GPS logging device is best.</u> Enabling WAAS (Wide Area Augmentation System) will improve its accuracy, compared to GPS alone.
- 3. <u>Cell phones with mapping apps are not very accurate.</u> At times they approximate your location by using cell towers instead of true satellite-based GPS triangulation, or they may try to place you on a road.

Refining the Map File



- 1. You then <u>need to adapt and refine the trail GPS file</u> to match the base map (and other alternate views like satellite photos). Base maps are not exact, and they vary.
- 2. For a public info map, you can <u>simplify the string of points</u> in the file that defines a curvy trail.
- 3. You should also <u>adjust the trail line to align it properly</u> with the base map's roads, parking lots, land parcel boundaries, streams and so on.
- 4. You need to <u>"zoom in" all the way</u> when doing this, to get the best accuracy.

Every Trail Should Have a <u>NAME</u>



- 1. After all, how else can people refer to it?
- 2. A good name gives a trail additional character.
- 3. <u>Names make trails easier for people to understand when</u> <u>there is a "spaghetti bowl" of trails in one area</u>, and people are out in the woods trying to figure out where they are.
- 4. A name facilitates an emergency response, if required.
- 5. In more practical terms, the computer file needs a name!

Every Trail Should Have a COLOR



- 1. <u>Colors are useful in many ways</u> for public understanding.
- 2. <u>Colors help define specific trails and their endpoints</u> within a "spaghetti bowl" network of trails.
- 3. The chosen <u>color needs to be used consistently</u> in printed maps, websites, and on-site trail signage and blazing.
- 4. To do this, you should <u>consider all of these needed uses</u> when selecting colors.

About COLOR Selection



- At least one color is taken by the map background. Google Maps takes up two - the base map color and the satellite image background color.
- 2. <u>White</u> is great for trail blazes on tree trunks, but not so good on Google Maps. When some trail was already blazed and identified by white, I had to use a light gray on Google Maps instead, to make it show up at all and not look like a road.
- 3. <u>Brown</u> is a terrible color for blazes on a tree trunk.
- 4. <u>Green</u> that blends into the trees or grass in a satellite image is also a bad choice.

Lower Merion -Melling Rolling Hill Park

 On-Site
 Image: Construction of the second of the secon

These maps all disagree, and do not match the actual trails that one encounters on foot.

Google Maps

Lower Merion O



Mill Creek Valle

Har Zion Temple

Barker's Mill

PhillyDayHiker.com

P Rolling Hill Park

> None of them have all of the helpful features that I believe are needed by the general public.

Radnor - Willows /Skunk Hollow



Lines are Not Enough



- Generally, trails cannot be accessed from every point along them. They have entry points, called "trailheads."
- 2. <u>Trailheads need to be shown</u> on the map, so people can know where they can get on the trail.
- 3. Many people need to drive to get to the trail, so it is <u>important to show parking</u>. A trailhead may or may not have parking, and knowing that matters.
- 4. I <u>mark bikeable trails</u> with a bike sign icon, to distinguish them clearly. My "Bikeable" means usable by the average person and bicycle, not riders with mountain bikes.

Middletown - Linvill Trail











Welcome! Click or Tap on Your Choice Below

% indicates an external link

Register Now! Annual Trails Summit Saturday, Feb. 6, 2021

The 9th annual **Philadelphia Western Suburbs Trail Summit** is scheduled from 9 AM to Noon on Saturday, February 6. It will be held virtually and will feature presentations on regional, county and local activities related to trails, walking and cycling. The summits are hosted by the Haverford Township Department of Parks and Recreation and the Friends of Haverford Trails. Register for free at https://attendee.gotowebinar.com/register/633658857731189771 The agenda is https://attendee.gotowebinar.com/register/633658857731189771

Local Trail Maps and Information for Eastern Delaware County and Lower Merion, PA

Here's a comprehensive resource showing trails throughout eastern Delaware County PA, plus adjacent Lower Merion Township in Montgomery County. Most of these trails are walking trails. Some are multi-purpose paved trails, often part of the developing Circuit Trails network.

An overview subpage is provided. Viewing the various township level (or sub-township level) webpages on this site will provide additional information, including more-detailed maps showing trailhead access points, parking provisions, trail bridges, water fords and other features.

Click or tap on either an image below or its title. Get out and enjoy our area's many trails!





This is the present look and content of www.havtrail.com

Its Google "My Maps" overlays now include 484 drawn features:

150 trail segments
214 trailhead and parking symbols
72 parks
23 municipalities
25 other features Click or tap on either an image below or its title. Get out and enjoy our area's many trails!



Overview of Trails in Philadelphia's Western Suburbs



Trails in Haverford Township



Trails in Lower Merion Township



Trails in Marple and Newtown Townships



% Trails in Middletown Township



Trails in Radnor Township



Scrolling down provides a series of photos and titles that can be clicked or tapped for navigation.

Larger Nearby Trails

These are links to informational websites for additional major trails in our general area, for which we get inquiries.





% Ridley Creek State Park Trails



% Schuylkill River Trail



% Valley Forge Park Trails

Philadelphia Western Suburbs Trail Summit



In 2013 Haverford Parks and Recreation and the Friends of Haverford Trails held a "summit" for people interested in trail development. With growing activity in our region, it has evolved into a larger "**Philadelphia Western Suburbs Trail Summit**." We have gathered the speakers' slide shows since 2017 here, so that this wealth of information can remain available and informative to everyone. **Click or tap here**.

The Circuit Trails



Farther down are similar photos and titles that link to external websites for "Nearby Larger Trails" that people always ask about.



Trails in Philadelphia's Western Suburbs

The interactive map below provides an overview of local walking trails (both formal and informal) and multi-purpose trails in the western suburbs of Philadelphia. This covers eastern Delaware County and Lower Merion Township. The trails are grouped by the most appropriate township.





The top-left choice "Overview" leads to this regional map, showing all of the mapped trails (without details), plus municipal boundary lines.

Instructions under each map explain how to use the interactive features.



Here the "Overview" map is opened to full screen.



Sign in

Montgomery Ave

Ardmore

HOUSE

d Rd

3043

C Mc

The "Overview" map, zoomed in to Haverford Township.



Haverford Trail and Bicycling Maps, Descriptions and Studies

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Haverford Parks & Rec Volunteer Trail Days

Make a difference in Haverford Township's Parks and Trails. Calling all volunteers! Haverford Township has over 17 miles of walking trails available to the public in addition to over 30 parks and we need your help! Some of our parks and trails have become overrun by invasive species such as Spotted Lanternfly, Japanese Knotweed, Garlic Mustard, and more. Be a part of the solution. We have volunteer days planned for December 2020-Spring 2021 to remove invasive species and plant natives. Some of these dates are posted now and more will be posted in coming months. We need a large network of people (YOU!) constantly controlling these species or they will continue to ravage our parks and trails. These projects require minimal equipment and zero knowledge because our trained staff will work with you every step of the way. We will implement the following health and safety guidelines: universal mask wearing, social distancing, increased sanitation, and temperature checks. You can sign up % here.

Welcome to useful information on bicycling and walking in and around Haverford Township, Delaware County, Pennsylvania, provided by the Friends of Haverford Trails. Our township boasts over 17 miles of walking and jogging trails open for your use, and they are documented here.

You will also find information for savvy bicycling in Haverford Township for people of varying abilities. This includes maps of "bike-friendly" roads, based on an analysis of their suitability for cycling. We include handy back routes, shortcuts and other little-known tips that make cycling safer and more enjoyable, including Haverford's designated on-road Bike Route across the northern edge of the township to Haverford Reserve. We also host information on neighboring areas here.





The top of the Haverford Township page, with specific local information including activities, parks and trails, bicycling info, bikeped-trail studies, and so on.



Heading outdoors?

<u>Click or tap the image or here</u> for present actual local weather conditions in Haverford Township, monitored and reported by the <u>Haverford Weather Station</u> at Haverford Reserve.



Join us! Show your support for improved bicycling and walking provisions in Haverford Township. Follow us on Facebook at & www.facebook.com/havtrail. The Friends of Haverford Trails is a task force of the Haverford Township Civic Council.

Parks and Trails in Haverford Township



We are fortunate to have walking and jogging trails in every corner of Haverford Township. Everyone living in Haverford has a trail no more than a mile away from his or her home. For a summary map and overview, with further links leading to more details, <u>click or tap the image or here</u>.

NOTICE: THE **WOODS TRAIL** IS ON THE QUADRANGLE SENIOR LIVING CAMPUS, WHICH HAS BANNED NON-ESSENTIAL VISITORS AS PART OF ITS COVID-19 EPIDEMIC RESPONSE. HAVERFORD COLLEGE HAS SIMILARLY BANNED NON-ESSENTIAL VISITORS TO ITS CAMPUS, INCLUDING ITS **NATURE TRAIL**. PLEASE DO <u>NOT</u> USE THESE TRAILS DURING THIS TIME. THANK YOU!

Bicycling in Haverford Township



Learn about bicycling information, online "bike-friendly" road maps, and infrastructure improvements, including safety shoulder striping and bike parking facilities implemented in Haverford Township. <u>Click or tap here</u>.

The Haverford Heritage Trail



Explore, exercise and enjoy on this 14 mile thematic loop tour around Haverford Township, which combines various neighborship streets and off-road trails into a trip through our local history. You can walk or bike the Haverford Heritage Trail past more than 30 historical sites in the township. <u>Click or tap here</u>.

The Five Campus Bike Route



Our effort to create a workable bicycle route between "sibling schools" Haverford College and Bryn Mawr College grew into a concept for a "Five Campus Bike Route" that also includes Harcum College, Rosemont College and Villanova University.



Scrolling down leads to this variety of local information, including the link to the "Parks and Trails" interactive map.



Parks and Trails in Haverford Township

NOTICE: THE WOODS TRAIL IS ON THE QUADRANGLE SENIOR LIVING CAMPUS, WHICH HAS BANNED NON-ESSENTIAL VISITORS DURING THE COVID-19 EPIDEMIC RESPONSE. HAVERFORD COLLEGE HAS SIMILARLY BANNED NON-ESSENTIAL VISITORS TO ITS CAMPUS, INCLUDING THE NATURE WALK TRAIL. PLEASE DO NOT USE THESE TRAILS DURING THIS TIME.

The interactive map below identifies over 17 miles of walking trails in Haverford Township, as well as its parks. The trails are summarized below, with links to more detailed maps and information. Some trails act as portions of the larger <u>Haverford Heritage Trail</u> loop around the township.





The "Parks and Trails in Haverford Township" page contains the township-level "Parks and Trails" interactive map.

Parks were added to this map so it could also be used on Haverford Township's Parks & Rec webpage. Interactive map instructions: Zoom in (+) and out (-) on this map, and drag to pan around. Click or tap on the "four corners" icon (upper right) to open a larger full-screen map. Click or tap on the small box icon (upper left) to open a list of trails. Click or tap on a trail or its listing to see its details, length and maybe a photo.

ADDINGHAM

Northwest Corner - Haverford Reserve

Map data @2021 Google Terms 2000 ft L

Besides its playing fields, playground and Dog Park, the Community Park at Haverford Reserve contains more than five miles of popular trails. They are comprised mostly of unimproved paths through woods and a meadow, many with varying levels of steepness. They are available for walking, jogging, off-road bicycling, and even cross-country skiing in winter when conditions permit. Part of one trail (Southbrook) is paved, level and fully accessible. The Reserve trail system is very enjoyable and fun to explore.

Click or tap here for a more detailed trail map and further information.

_ te Rd

Northeast Corner - Haverford College

MARCH 19 NOTICE FROM HAVERFORD COLLEGE:

In light of how the COVID-19 crisis is progressing, **Haverford College is taking the unfortunate but necessary step of closing the campus and Nature Trail to outside visitors**. As Governor Tom Wolf has emphasized in ordering the temporary shutdown of all non-life-sustaining business activity, social distancing is our strongest weapon against the virus. And though we had hoped to permit continued access to College grounds and the Trail, it is now clear that such access increases the threat level and should not continue.

That's why only Haverford College campus residents, students, faculty, staff, and emeriti may access the campus and Trail, effective immediately. Approved vendors will continue to have campus access for business purposes only.

COVID-19 can and will be overcome, but only if we all do our part to thwart its spread. Thanks for understanding. We look forward to welcoming you back to campus when the COVID-19 danger has passed.

West Side / Southwest Corner - Darby Creek

There are three basic segments of trail along Darby Creek (all shown in orange), each about one mile long. At this time, they are not connected to each other. They are easy, level walks. The **Center Segment**, from Merry Place on Glendale Road to Hilltop Road (just south of West Chester Pike), is a hard-surfaced, multi-use trail that is fully accessible and also great for baby strollers. <u>Click or tap here for a more detailed trail map and further information.</u>

Southeast Corner - Powder Mill Valley



Below the township map are introductions and links to even more localized interactive maps. (Only Haverford has this added layer.)



Powder Mill Valley Walking Trails

This interactive map shows the walking trails along Cobbs Creek in Haverford Township. Several of these trails serve as part of the <u>Haverford Heritage Trail</u> loop around the township.





This is the local area map for the Powder Mill Valley Park area along Cobbs Creek.

Trailhead, parking, bikeability, landmark and other added features appear on this detailed map.



Here is the full-screen view, with a legend on the left.



Friends of Upper Darby Trails

Trail and Bicycling Maps, Descriptions and Studies



A few of the participants in the first Upper Darby Trail Day hike upstream along Darby Creek

The Friends of Upper Darby Trails are pleased to present information on trails in Upper Darby township in Delaware County, Pennsylvania, as well as general cycling and walking information. You can show your support for improved bicycling and walking provisions in Upper Darby and Drexel Hill, and stay in touch with news, activities and more, by following us on Facebook at **%** www.facebook.com/UpperDarbyTrails.

Trails in Upper Darby and Vicinity



The Upper Darby page is tailored to the Friends of Upper Darby Trails group.

The Marple-Newtown page is handled similarly.



This is the full-screen map for the Upper Darby area (with parks).



Darby Creek Trail-County Kent Pa...

name

Darby Creek Trail-County Kent Park Seg

description

Regional CIRCUIT TRAILS segment. Macadam surface, wide, level, scenic. (0.5 mi.) See www.havtrail.com/upperdarby/



Clicking on "Darby Creek Trail-County Kent Park" brings you to this.





Here's the Lower Merion Township page. Presently it is a basic page, containing just the interactive map and instructions on how to use it.



Full screen map, zoomed in to the Gladwyne area trails.



Full screen Radnor map, zoomed in to Willows / Skunk Hollow Park.





The same view, switched to Google's satellite photo background.



← Skunk Hollow-Boy Scout Bridge

name Skunk Hollow-Boy Scout Bridge

description

Impressive footbridge over Darby Creek, linking the trails on both sides.



After clicking on "Skunk Hollow-Boy Scout Bridge" in the legend.



Full screen Springfield Area-Smedley-Swarthmore map.



Indian Rock Trail

name Indian Rock Trail

description

2 photos

Narrow dirt and rock walking trail, starting behind the jungle gym in the playground of Indian Rock Park, with a steep descent to the edge of Darby Creek. At the bottom,, one leg runs along the edge of the creek upstream to the northwest (with a stepping stone crossing of a side stream toward the end). A longer leg extends to the east. A steep climb is required back up out of the stream valley to the park playground. This rustic wooded trail is directly across Darby Creek from the Darby Creek Trail-Drexelbrook Segment. (0.9 mi.)



After clicking on "Indian Rock Trail" in the legend.

Reserve Trails Updating



In mid-2020, Haverford Parks & Rec decided their information materials on trails in Haverford Reserve needed updating. This directly built off the website mapping that I was already doing.

- 1. <u>Trail changes</u>: Some "trails" were downgraded to park paths, while some new trails had been added.
- 2. <u>Consistency</u>: It was decided to make all information sources consistent and up-to-date.
- 3. <u>Holistic approach</u>: Thinking about all of the types of info materials up-front at the same time led to a better result.



The updated Haverford Reserve park and trail interactive map.







It took a number of meetings, covering many details, with Parks & Rec staff to achieve a final satisfactory result.

The re-working of havtrail.com GPS trail files informed Greg's work on his updated map and text panels. All map and trail details were double-checked and coordinated.

Both the on-line and physical information was massaged to work well together and be consistently presented.

TRAIL LEGEND

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ackwoods Trail (0.83 miles) 🔶	D • Stay on the trail.
lue Route Trail (0.67 miles)	M • Leave no trace.
Grace Trail (0.26 miles)	 Keep off private propert All dogs must be on least
enape Trail (0.37 miles)	D CASH CALL
Aeadow Trail (0.70 miles) 📒	D
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arkview Drive Sidepath (1.00 mile) 🍵	Р
PECO Trail (0.40 miles)	D CONTRACTOR
tailroad Trail (0.28 miles) 🔶	D 85% of Haverford Towns
cout Trail (0.60 miles)	^D residents who use these t
outhbrook Trail (0.50 miles) 🍵	P RECYCLE. Please help keep environment clean.
witchback Trail (0.15 miles) 👘	M
/eterans Trail (0.15 miles) 🍵	D
Easy Trail Rating D Dirt Surface	Haverford Township Recre
Moderate Trail Rating P Paved Surface	9000 Parkview Drive
Difficult Trail Rating M Mixed Surface	Haverford, PA 19041

TRAIL RULES

ails

ntion

HAVERFORD RESERVE



Waiking the trails of the Haverford Reserve, you will experience old growth hardwood forests, two first order streams, wetlands, a meadow, and diverse flora and fauna. Alongside the trails, you may witness our community rain graden, water retention basins, and Trevitalize plantings.

Natural Lands Trust completed an ecological assessment of the 124 acres of open space. In their assessment, which can be found on our website (www.HavTwp.org.), Natural Lands Trust describes the vegetation, wildlife and habitat found in this watershed.

Benefits of walking the trails include improvements to your cardiovascular, muscular, and mental health and will increase your appreciation of nature.

Please enjoy our trails and help us preserve our open space. For questions or comments, contact us at recinfo@havtwp.org





The hand-out folded brochure for the Reserve trails was updated. Rather than using separate artwork for its map, we had Greg design his map so that it could be used here, too.

Interestingly, Parks & Rec staff had discovered that while older people liked picking up a map brochure, many younger people simply took a cell-phone photo of the trailhead sign to refer to while out on the trails.





At my suggestion, Parks & Rec staff added durable printed trail blaze signs into the project. I had first seen these on trails in Middletown Township.

They replace painted blazes on tree trunks, giving more info. These are generally known as "confirmation" or "reassurance" trail blazes, and they reaffirm to people that they are still on the (right) trail.





Friends of Haverford Trails volunteers installed the blaze signs. We received immediate positive responses from trail users.

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www.havtrail.com

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