

Old Hickory Nature Trail

Davidson County, TN



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April 28, 2006

ABSTRACT

The purpose of this project is to propose changes and additions to an existing Army Corps of Engineers path at the tailwaters of Old Hickory Lake in Davidson County, TN. Such changes would be beneficial to current and future trail users and would restore the path to the standards of its National Recreation Trail designation. To create these improvements, I searched product catalogs, stores, and the internet to finding reasonably priced, high-use sustainable items including garbage cans, recycling bins, benches, and trail markers. I also conducted a flora and fauna inventory of the property to ascertain natural resource characteristics. I then researched these characteristics, largely from class lecture notes, to compile a self-guided tour packet. In addition, I used GPS to draw the trail and to pinpoint marker locations. I also proposed updates to the entrance board and created brochures and a mailing list to inform schools and other community organizations about the opportunities offered at the nature trail and surrounding area.

With over 150 schools in Nashville and the neighboring communities, the nature trail could potentially cater to thousands of students. Its resources are unique and varied, including a pawpaw patch, a wetlands area, and snag and edge habitats, among others. Overall, the additions I propose total around \$3,200, including \$2,500 of high priority recommendations. However, it is my opinion that having a well-marked trail, with safe, clean amenities, that will help folks become more familiar with, and connected to, nature more than outweighs these costs.

TABLE OF CONTENTS

LIST OF APPENDICES	iv
TRAIL HISTORY AND CURRENT CONDITION	1
FUTURE POTENTIAL.....	2
Increased Amenities.....	3
Self-Guided Trail Packets.....	4
Tree Identification Placards.....	6
Entrance Board Revamp	6
Increased Community Visibility.....	7
Webpage Update.....	7
TOTAL COST ANALYSIS.....	8
I. Increased Amenities.....	8
II. Self-Guided Trail Packets.....	9
III. Tree Identification Placards.....	9
IV. Entrance Board Revamp.....	10
V. Increased Community Visibility.....	10
VI. Webpage Update.....	10
Prioritization of Proposed Changes.....	11
Recommendations to increase trail use.....	11
Recommendations for an enhanced trail experience.....	12
CONCLUSION.....	13

Appendix Number	Page
1. Vandalism problems at Old Hickory Nature Trail, April 2006.	14
2. Placement of new benches and trashcan.	16
3. Suggested bench purchase, Model 115-1125, from The Park Catalog.	17
4. Suggested model for trashcan from Pilot Rock.	17
5. Suggested recycling bins and model for frame from RecyclingBins.com.	17
6. Sample of a purple martin house from Northern Tool and Equipment (\$19.99, pole not included).	17
7. Self-guided trail packet.	18
8. Example of a trail marker (Harbison State Forest, Columbia, SC).	26
9. Placement of markers for self-guided tours.	27
10. Placement of tree identifiers.	28
11. Current trailhead.	29
12. Self-guided tour packet container: Standard Outdoor Brochure Box from Sanzo Specialties, Inc.	29
13. Self-guided tour packet container: Deluxe Outdoor Brochure Box from Sanzo Specialties, Inc.	30
14. Brochure to attract community organizations to the trail.	31
15. Brochure to attract school groups to the trail.	33
16. Mailing list for Nashville area and surrounding schools	35
17. Brochure mailing list for community organizations.	48
18. Code for the updated Army Corps of Engineers trails website.	52
19. Visual of the updated Army Corps of Engineers trails website.	56

TRAIL HISTORY AND CURRENT CONDITION

The Old Hickory Nature Trail is operated by the United States Army Corps of Engineers. It is located in Davidson County, TN, below Old Hickory Dam on the left descending bank of the Cumberland River. Furthermore, it is located within Metropolitan Nashville and is a part of the Metro Nashville Greenways System. Because of the dam and surrounding attractions such as the Hermitage, visitors are from out-of-town as well as local. Moreover, a nearby swim beach and boat launch ramp also draw visitors who may wander down to the trail.

The nature trail was completed in 1973 and received the status of a National Recreational Trail in 1976 by the Department of the Interior. The trail is composed of 4 distinct paths: the Woodland Loop, the Willow Swamp Loop, the Wildlife Loop, and a main stem trail, creating a 1 and 2/3 mile trail system. Only the main stem and a short part of the Wildlife Loop are handicap accessible. The rest of the Wildlife Loop, as well as the Willow Swamp Loop and Woodland Loop, are comprised of compacted dirt, woodchips, and dead organic matter. Both the Willow Swamp Loop and Woodland Loop utilize boardwalks in sections to traverse over wetland areas. Therefore, these paths will likely never be handicap accessible. The Wildlife Loop, on the other hand, could potentially be made handicap accessible.

Overall, the paths take visitors through a variety of vegetative covers that make the nature trail unique and particularly important as an environmental education tool. The Tennessee Wildlife Resource Agency designated the trail as a Wildlife Observation Area, meaning that it provides the general public access to an area where large enough numbers of certain wildlife species (bobwhite quail, squirrels, rabbit, waterfowl, and songbirds) exist to observe. Nesting boxes for an assortment of species can be found throughout the trail in an attempt to enhance viewing opportunities.

Over the years, the nature trail has become a target of vandalism and has had a significant decline in visitation (Appendix 1). In the past, the trail was used by school groups, scouts, and

conservation groups, however, there have been no recorded group activities in the past several years. There are several possible reasons for these changes. First, it is possible that failing to update the trail's interpretive brochure discouraged repeat visitors. (When I went to the Old Hickory Lake Resource Manager's Office asking about the trail, I received a self-guided tour packet from 1977. It no longer corresponded to any markers along the trail, and many of the features described in it no longer existed. Furthermore, none of the packets were available at the trailhead or at the Old Hickory Beach attendant's booth.)

Second, it is possible that a lack of conscientious advertisement contributed to the visitation decline. Brochures can easily get lost in any organization and if folks are not continually reminded of an opportunity, many forget that it even exists. It is likely that after the trail generated initial excitement by its opening and its federal recognition that interest in the trail began to wane. Lastly, it is possible that the increase in the number of boat docks on Old Hickory Lake prevented rangers from tending to the trail on a regular basis. If litter or downed limbs were not being removed or if the amenities fell into disrepair, trail users would probably not return, and a decline in visitation usually corresponds with an increase in vandalism.

FUTURE POTENTIAL

This nature trail has the potential to teach hundreds of folks, young and old alike, about the natural world around them – and how it can relate to them. For example, learning about the mosquito life cycle can show individuals how to prevent mosquito breeding grounds from forming, while identifying wetland indicators can help prospective landowners realize that they may not be able to build on a particular site. Similarly, reading about exotic, invasive plant species may prevent a gardener from introducing a shrub that will out-compete neighboring vegetation.

To most effectively convey this type of information to the public, I suggest a series of actions. These include installing new amenities and tree identification placards, creating self-guided trail

packets, and redesigning the entrance board. In addition, I propose updating the Corps' Trails website and mailing out brochures to schools and community organizations that may be interested in group visits.

Hopefully, the combined effects of these recommendations would increase the trail's visitation numbers and create a sense of trail ownership by the surrounding communities. These results could have an enormously positive impact on the future of the trail. Increased usage should reduce the likelihood of vandalism because the potential of getting caught is greater, while community ownership may foster partnerships with the Corps.

Increased Amenities

The amenities at the Old Hickory Nature Trail are in fairly good condition with the exception of some spray paint vandalism and carvings. I recommend repainting the damaged benches, along with adding 2 more to provide additional rest stops along the Woodland and Wildlife loops (Appendix 2). Additional rest stops increase the trail's appeal to folks of all physical abilities. Benches that blend into natural surroundings can be purchased from a number of locations. After looking at several product catalogs and websites, I recommend buying from The Park Catalog. They offer a 6 ft stationary bench, Model 115-1125, with a lifetime warranty for \$127.00 (Appendix 3). With an estimated freight shipping charge of \$167.78 for both benches, the total cost of 2 benches would be \$421.78. This is by far the best deal I found for a park bench designed to prevent theft.

In addition to a bench, a trashcan is also necessary along the Woodland Loop (Appendix 2). Having strategically placed trashcans will hopefully reduce litter along the trail. I suggest building a trashcan hanger emulating Model WP-1TP from the Pilot Rock Catalog #190 (Appendix 4). The mounting hardware can be purchased from Pilot Rock for \$17.95 plus shipping, while a galvanized 31 gallon trashcan may be purchased from a hardware store for around \$15. A 6 inch by 6 inch by 8 foot

yellow pine post can be purchased for about \$20.00, and a bag of concrete to secure the post costs \$3.39 at Ace Hardware.

A recycling bin center near the trailhead is also necessary to help protect the environment. My preferred option is available at recyclingbin.com. I like the look and style of the 2-bin rectangular Hexcycle frame and the Hexcycle 2 bins (Appendix 5). The frame costs \$39.00 plus shipping, but could probably be built fairly easily from scrap lumber around the office or by a scout group as a field project. So, while I would not necessarily recommend buying the frame, I would recommend buying 2 bins at a cost of \$34.95 apiece. One should be for aluminum and one for plastic. The bins come with pre-printed decals, are made of crack-proof plastic, and allow drainage at the bottom. They should also be fairly inexpensive to ship because they are sent folded flat.

A purple martin house would make another nice addition to the trail. Purple martins help control mosquito populations and are a favorite among bird enthusiasts. The mosquitoes around this area are particularly plentiful during summer and can detract significantly from the trail experience. Martin houses can be purchased at a variety of locations and can cost anywhere from \$19.99 to upwards of \$400 (Appendix 6). I suggest putting the house next to the wildlife observation platform over the pond because martins like clear areas that are also fairly well used. These characteristics help prevent predation. Being near stagnant water also ensures that mosquitoes will be present as a food source.

Self-Guided Trail Packets

The purpose of providing visitors with self-guided trail packets is to increase the educational value of the Old Hickory Nature Trail. Trail packets correspond with on the ground markers strategically placed to highlight ecological features unique to the area. I have created an 8-page trail packet that includes information on wetlands, mosquitoes, pit and mound topography, various plant species and habitat types, wildlife, and the impacts of forests on water (Appendix 7). Two thousand

copies of this packet can be printed on 50 lb offset paper for an estimated cost of \$800 by Wentworth Printing in Columbia, SC. Five thousand copies would cost \$1175.

In addition to the copies from Wentworth Printing, I recommend initially printing 3 more copies of the trail packet on 65 lb uncoated cover paper and laminating them at an additional cost of \$5 apiece. (The heavier paper will prevent the packet from curling up.) These laminated copies could be useful to trail users in rainy or misty weather. Monitoring the presence of the laminated copies to find out if they are being used in appropriate weather or if they are simply preferred over regular copies would help determine if more should be laminated or not. My concern is that the laminated copies will disappear within days, even without rainy weather, and the cost of continually restocking laminated copies will not outweigh the benefits of having them.

Having self-guided tour packets would only be effective if there are corresponding markers along the trail. These markers must be as vandal-proof as possible while still being visible to trail users. I recommend a marker fashioned after the ones from Harbison State Forest in Columbia, SC (Appendix 8). The posts are 4 inches by 4 inches by 4.5-5 feet and are cemented into the ground so only 1.5-2 feet remain above ground. The tops of the posts are cut at a 35° angle and a number is routed into the top of each one. These numbers correspond to the numbers in the trail packet.

The lumber for this project can be purchased from W.R. Durham and Sons Lumber, a small business in Hendersonville, TN, at a cost of \$19.90 per 4 inch by 4 inch 16 foot piece. The trail packet I designed requires 13 markers, meaning a total of 5 boards are necessary. Each marker will also require an 80 lb bag of concrete. This concrete can be purchased from Ace Hardware at \$3.39/bag.

To determine the locations of the trail markers, I used a Trimble Global Positioning System (GPS) unit and recorded coordinates of spots I thought they would be best in. I then used ESRI's ArcGIS 9 program to create a map based on the coordinates of both the proposed marker locations and

of the trail (Appendix 9). By using GPS, the individuals who will be installing the markers can determine where I envisioned the markers being placed within a few meters of the actual spot.

Tree Identification Placards

The Old Hickory Nature Trail has over 20 tree species along its 1 2/3 miles. I think that identifying prime specimens of some of these species would not only increase visitors' dendrology skills, but would also increase their curiosity about the natural world. Increasing information flow has the potential of fostering a caring attitude about the environment in general and forestry in particular. Therefore, I GPSed the location of 12 different tree species to be labeled (Appendix 10). These species include both hard and soft woods, as well as a variety of deciduous and evergreen species.

To mark these trees, I recommend routing their common names into slabs of wood approximately 2 inch by 8 inch by 1½ feet and securing them to their respective representative tree. A 2 inch by 8 inch by 16 foot piece of lumber is around \$17.00 from a hardware store, and making 12 labels would require 2 pieces. Overall, the labeling materials would cost around \$34, and routing the signs would take several hours.

Entrance Board Revamp

The current trailhead is not in terrible shape; however, I do not feel that it contains all necessary components (Appendix 11). First, a box should be secured to the bottom right corner to contain the self-guided trail packets, replacing the map of the trail's overall location. I recommend a model from Sanzo Specialties, Inc. The Standard Outdoor Brochure Box can hold 25 packets, has a weighted drop-shut lid making it weatherproof, is easily mounted, and costs \$8.95 plus shipping (Appendix 12). On the other hand, there is a Deluxe Outdoor Brochure Box that is more expensive, \$19.95 plus shipping, but holds approximately 35 packets and claims to be virtually unbreakable (Appendix 13). In this area prone to vandalism, I recommend the latter model; however, the former could be bought if the budget is tight or as an experiment to see just how long a brochure box would last.

Other changes I would like to see include placing a note above the trail packet box encouraging visitors to return any unwanted packets. Next, I would like to see the current map in the center of the board replaced with an updated one that shows trail marker locations. Furthermore, a warning about poison ivy under the “Safety is our Highest Priority” subheading would be a nice addition. Moreover, a plexiglass cover, approximately 4 ft by 3 ft, should be placed over the new entrance design to prevent it from becoming dirty. This plexiglass sheet will cost around \$20 from a hardware store. Lastly, the back of the kiosk should be repainted to cover some vandalism.

Increased Community Visibility

Currently, the Old Hickory Nature Trail is not highly advertised in the area. To increase public knowledge of, and pride in, the area, I recommend providing community organizations such as scout troops, recreation centers, and senior centers with brochures that contain directions to the trail, surrounding attractions and amenities, and a description of why visiting the area would be a good trip for a group interested in gaining educational insight while having fun (Appendix 14). I believe a different brochure that highlights the availability of park rangers to give tours during the week would also be good to send to school groups (Appendix 15). These brochures can be printed by Wentworth Printing at an estimated cost of \$1,020 for 2,000 copies or \$1215 for 5,000 copies. Including copies of the trail packets with the brochures would further inform the recipients of what types of learning opportunities the trail provides. Short phone calls prior to brochure distribution could tell recipients what they are about to receive and who specifically might be interested in the information. I have included a potential mailing list of both surrounding schools and community organizations in Appendices 16 and 17, respectively.

Webpage Update

The current Army Corps webpage for the Old Hickory Nature Trail does little to entice webpage visitors to the trail. A lack of directions leading to the trail prevents the casually curious from

even being able to visit the trail without e-mailing the public affairs officer or calling or writing the resource manager's office. In addition, distances for the individual loops are not listed, and the picture leaves something to be desired. Therefore, the webpage I propose includes more pictures, more facts about the trail, directions to the area, and a map of the loops including lengths (Appendices 18 and 19).

TOTAL COST ANALYSIS

This section is devoted to sifting through all the earlier recommendations in an attempt to find the suggestions that will likely have the highest impact on trail visitation at the most feasible and reasonable costs. To begin, I itemize and total the proposed expenditures under each subheading of the Future Potential section. (Where more than one option exists, asterisked items are the ones used for cost analyses.) Then, I prioritize the changes to create a concise set of recommendations that should immediately increase trail use, as well as a set of peripheral recommendations that will enhance the overall trail experience.

I. Increased Amenities

A. (2) 6 ft Stationary Benches

1. The Park Catalog, Model 115-1125, lifetime warranty: \$127.00 apiece
2. Freight shipping charge: \$167.78 for both benches
3. Total cost: \$421.78

B. (1) Trashcan

1. Mounting hardware from Pilot Rock: \$17.95+ shipping
2. Galvanized 31 gallon trashcan, Home Depot: \$15
3. 6X6X8 yellow pine post, Home Depot or Lowe's: \$20
4. 80 lb bag concrete, Ace Hardware: \$3.39
5. Total cost: \$56.34, plus shipping

C. (2) Recycling Bins

1. Frame from RecyclingBin.com: \$39.00+ shipping
2. Bins from RecyclingBin.com: \$34.95+ shipping apiece
3. Total cost for frame and bins: \$108.90, plus shipping
4. Total cost if frame built separately: \$69.90, plus shipping*

D. (1) Purple Martin House

1. 12- room house from Northern Tool and Equipment: \$19.99
2. Standard shipping: \$9.25
3. Telescopic pole for house from Northern Tool and Equipment: \$39.99
4. Standard shipping: \$9.25
5. Total cost for house and pole: \$78.48
6. (2) 10 ft metal pole from Home Depot: \$8.49 apiece*
7. Total cost for house and regular metal pole: \$46.22

E. Total for all recommended amenity changes (lowest cost): \$594.24

II. Self-Guided Trail Packets

A. Packets

1. 2,000 copies from Wentworth Printing: \$800+ shipping
2. 5,000 copies from Wentworth Printing: \$1,175+ shipping*
3. (3) Laminated copies: \$5 apiece
4. Total cost: \$1,190, plus shipping

B. Trail Markers

1. (5) 4X4X16 posts from W. R. Durham and Sons Lumber: 19.90 apiece
2. (13) 80 lb bags of cement from Ace Hardware: \$3.39 apiece
3. Total cost: \$143.57

C. Total cost for recommended changes: \$1,333.57, plus shipping

III. Tree Identification Placards

A. Placards

1. (2) 2X8X16 post from Lowe's or Home Depot: \$16.97

B. Total cost: \$33.94

IV. Entrance Board Revamp

A. Self-guided trail packet container

1. Sanzo Specialties, Inc. – Standard Outdoor Brochure Box holds 25 packets: \$8.95+ shipping
2. Sanzo Specialties, Inc. – Deluxe Outdoor Brochure Box holds 35 packets: \$19.95+ shipping*

B. Plexiglass from Home Depot: \$20.00

C. Total Cost: \$39.95, plus shipping

V. Increased Community Visibility

A. Color Brochures

1. 2,000 copies from Wentworth Printing: \$1,020+ shipping*
2. 5,000 copies from Wentworth Printing: \$1,215+ shipping

B. Mailings

1. (157) School mailings: approximately \$78.50
2. (36) Community organizations: approximately \$18.00
3. Total estimated cost for mailings: \$96.50

C. Total cost: \$1,116.50 plus shipping

VI. Webpage Update – Free

VII. Total Cost for all Recommendations - \$3,118.20 (Does not include shipping for many items)

Prioritization of Proposed Changes

Recommendations to increase trail use.— In order to increase trail visitation, updating the Old Hickory trails webpage would be the most economical change. Telling folks about the nature trail, both what it offers and how to find it, is half the battle of getting them there. With this in mind, I feel that the recommendation to send out brochures to different organizations is essential and has the potential to create new partnerships. Such partnerships can be highly beneficial in further enhancing the trails at no cost. For example, other trails around the country use volunteers from local school and community groups for trail clean-up days and invasive exotic plant removals. Also, at other areas of Old Hickory Lake, partnerships with scout groups have resulted in more bat boxes and bird houses.

Ensuring that individuals and groups who visit the trail will have an educational experience is also vital to enticing them to visit. To this end, I think that having the self-guided tour packets and corresponding markers is necessary. Updating the packet about every 2 years should encourage repeat visitors because new information could be learned by revisiting the area. Making the packets available to trail users is one reason why revamping the entrance board should possibly be a high priority. However, it is possible to distribute the packets through the attendant at Old Hickory Beach, a short walk away. Also, the new webpage design makes packets available to download and print online. I think without having the packets at the trail though, most folks will not go to the effort to find them. This means that they will not gain the educational experience this interpretive trail can afford. Therefore, the addition of the packet container to the trailhead is highly recommended but not required. I suggest the Deluxe Outdoor Brochure Box.

The tree identifier placards are another change that I would like to see but cannot call highly recommended. In the past, a similar effort was instituted at the trail; however, vandals removed most of the signs. There is just one remaining along the Willow Swamp Loop, as far as I can tell. I talked with the rangers who had installed the signs, and they said that the vandals must have gotten pretty

ingenious in how they removed the labels. The signs had been placed high in the trees and were not anything special that should have been particularly attractive for theft. It is possible that increasing trail use will decrease the amount of vandalism, allowing installed signage to remain intact. Therefore, I recommend installing signs, should funding allow, 6 months to a year after brochures have been sent out and the webpage has been updated. This period should give enough time for visitation to increase, thereby discouraging vandalism.

Recommendations for an enhanced trail experience.— Once folks experience the trail, they may find that they would like to return purely for a leisurely stroll or exercise. Making the amenity recommendations should help increase the likelihood of repeat visitors. If trail users find they have places to rest where mosquitoes will not bother them and they can see the scenery untainted by litter, they are likely to tell their friends and to return to the site. My first recommendation is repainting the back of the trailhead, some of the benches, and some pavement, that has been degraded by vandalism. Regardless of whether any other changes are made or brochures are mailed out, this action is absolutely obligatory. Folks should not have to shield their children's eyes on a supposedly family-friendly forest walk. This courtesy should be given to current trail users.

My next recommendation would be installing the purple martin house with non-telescopic pole for three reasons. First, the mosquito problem is intense, particularly in summer. Second, there are trashcans and benches along the main stem of the trail, but no martin houses, and third, the non-telescopic pole is cheaper but will achieve the same results.

After that, I recommend adding plexiglass to the entrance board after it has been cleaned. This will ensure that the board remains readable and spotless. The trailhead creates the first impression visitors have of the area. One that is covered in black gunk is not highly appealing and does not leave a good impression.

Next, I feel that the recycling bins are a priority. Very few Corps sights have recycling capabilities, and I think one that emphasizes environmental awareness definitely ought to. I am placing this above trashcans and benches because, as noted earlier, at least some of these already exist along the trail. Recycling is currently picked up bi-monthly at the Corps campgrounds by a ranger, and dropping by the nature trail to empty the ones there would not be out of the way. In addition, the recycling center the Corps' staff uses is relatively close to the Old Hickory Nature Trail.

The 2 stationary benches and 1 trashcan are low priority additions. The bench along the Woodland Loop would be nice because this is the longest trail and no seating currently exists there. The Wildlife Loop bench would be in a good location for someone who was done using the wildlife viewing platform but whose companions were not. Lastly, the trashcan is at the start of the boardwalk and was placed there because I saw an unusually high amount of litter in the wetland area of the Woodland Loop.

CONCLUSION

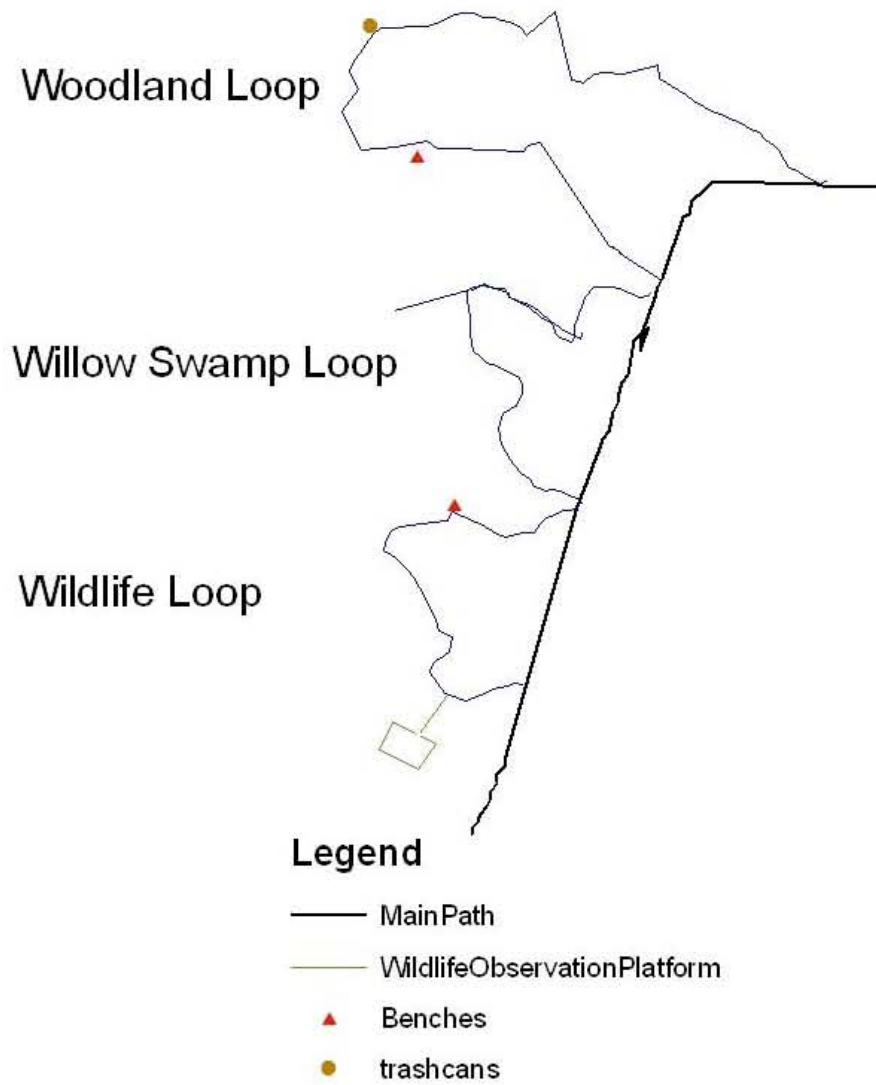
The final estimated cost of the high priority recommendations is \$2,516.24, plus the cost of shipping for many items. The printing costs comprise the largest percentage of this endeavor; however, this can likely be reduced by using connections in the printing field. Vaughan Printing in Nashville could probably provide a 20% discount on printing costs, and because they are located in Nashville, shipping costs would not apply. A 20% discount would reduce printing costs by about \$500, nearly 1/5 of the high priority recommendations cost. That is a substantial amount, yet still leaves \$2,000 that must come from somewhere. To pay for these changes, I recommend that the Corps apply for grants. Grant applications are usually time consuming and do not necessarily guarantee funding; however, I think that spending the time to write a grant proposal for the Old Hickory Nature Trail would be rewarding. Both the location of the trail and its educational potential make it a great candidate for funding.

Appendix 1. Vandalism problems at Old Hickory Nature Trail, April 2006.





Appendix 2. Placement of new benches and trashcan.



Appendix 3. Suggested bench purchase, Model 115-1125, from The Park Catalog.



Appendix 4. Suggested model for trashcan from Pilot Rock.



Appendix 5. Suggested recycling bins and model for frame from RecyclingBins.com.



Appendix 6. Sample of a purple martin house from Northern Tool and Equipment (\$19.99, pole not included).



Appendix 7. Self-guided trail packet.

1. Welcome

As you proceed along the trail, the numbers in this interpretive guide will correspond with the numbered markers along the trail. These markers indicate natural features unique to the area and provide descriptions that are designed to enhance the outdoors experience. In addition to the numbered features, several of the plants along the trail are also identified.

For your convenience, rest stops are provided periodically, and all trails are visibly marked.

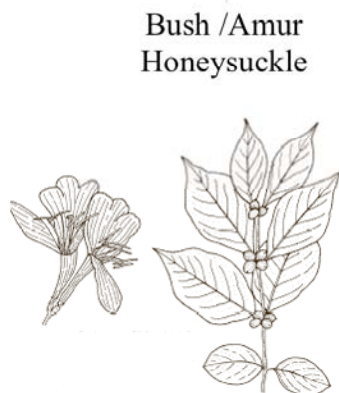
We, at the US Army Corps of Engineers, encourage you to enjoy yourself & to come back often as the natural world constantly changes – day-to-day and season-to-season.

2. Exotics

Exotic plants, such as privet, bush honeysuckle, Japanese honeysuckle, and autumn olive have become a nuisance in today's forests. They overrun nature preserves, recreational lands, and a lot of backyards. And as they spread, they decrease biological diversity by out-competing native vegetation thru a variety of methods:

- Abundant seed production and well-protected roots
- Lack of natural predators from the species' home range, and
- Partial shade tolerance allowing them to become established under developed forest canopies

The removal of these species is necessary, yet costly and time-consuming. Eradication involves not only expensive herbicides, but also continued monitoring and multi-year treatment of the infested area and adjacent lands. For these reasons, complete eradication has been merely wishful thinking to date.



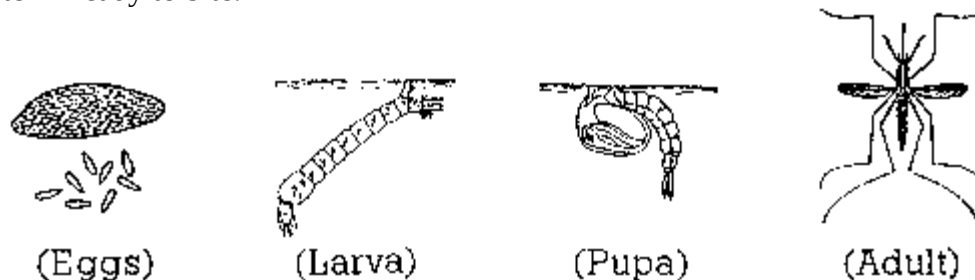
3. Edge Habitat

With today's constant fragmentation of forests due to roads, neighborhoods, and the like, edge habitat has become a topic of interest. Edges that show a gradual transition from one habitat type to another can provide an abundance of food and shelter for a diversity of wildlife. However, sharp edges like those created by clear cutting, lack the width and species diversity of gradual ones. Abrupt edges, like the one found here, can actually be detrimental to wildlife. Birds that nest in such edge habitats are more susceptible to predation because predators find it easier to hunt a narrow strip of land than a wide one. Also, the area's lack of vertical structure diversity (or plants of varying heights) excludes many habitats necessary for some wildlife. For example, species that nest in briars or shrubs won't find a home in this "clean" edge.

4. Mosquitoes

With a background that spans the last 300 million years, it is no wonder mosquitoes have become so adept at finding food. They can detect carbon dioxide and lactic acid at a distance of 100 feet, are able to see their prey moving, and can perceive heat produced by warm-blooded animals.

They are so abundant here due to the area's large amount of standing water. Not only do the female mosquitoes lay their eggs directly on the surface of stagnant water, but water is also home to the mosquito larva and its subsequent pupal stage. Only at the stage of an adult will the mosquito emerge from the water -- ready to bite.



With the ability to carry diseases like malaria and West Nile virus, it's important to be protected against mosquitoes and their breeding grounds. Using insect repellent and draining standing water are two good detractors. Additionally, here at the nature trail, we are attempting to attract Purple Martins, birds known for mosquito extermination, with use of white houses like the one found near the wildlife observation platform on the Wildlife Loop.

5. Wetland Types

Wetlands are valuable natural resources that must be preserved. They can improve water quality, reduce flood and storm damage, help regulate water levels in watersheds, and provide specialized wildlife habitats. There are two primary types of wetlands common in the Southeast: swamps, like the one seen before you, and marshes.

- a. Swamps – non-peat wetlands, start as shallow bodies of water that become filled in with trees and shrubs, can experience both wet and dry periods during the year, inhabited by an abundant variety of animals, insects, and plant life that live in the water or in the vegetation bordering the waters
- b. Marshes – open, non-peat forming wetlands dominated by sedges and other monocots such as cattails, rushes, water lilies, and pond weeds, characterized by seasonal water level fluctuations and relatively high amounts of water flow, influenced by ground and surface waters, can be fresh or saltwater

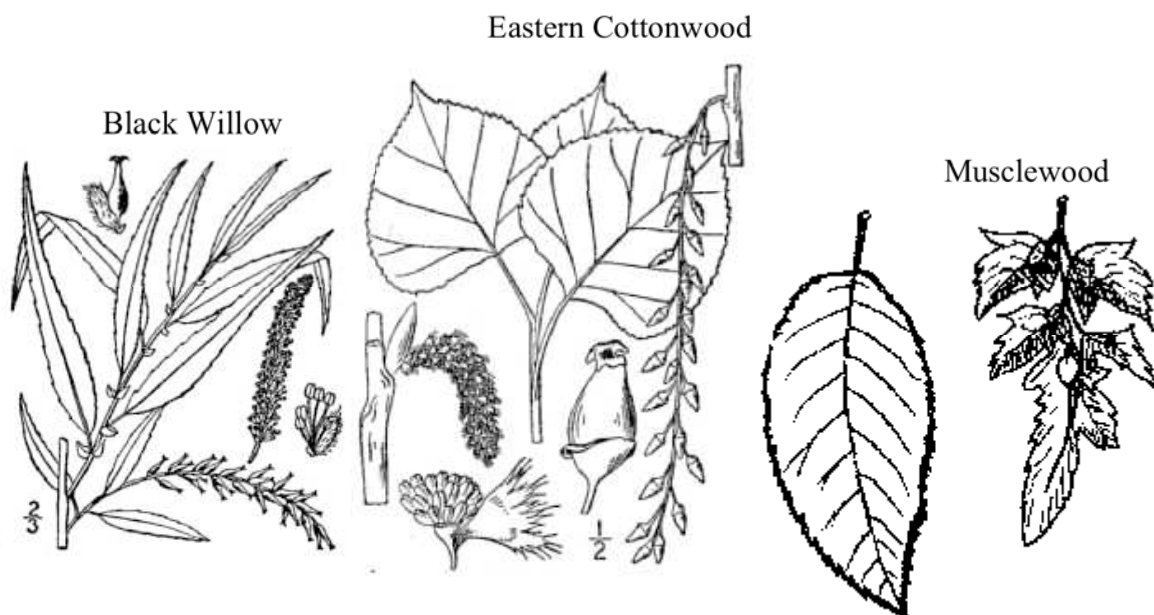
6. Wetlands Delineation

The three main factors used to determine whether an area is a wetland are

1. Hydrology
2. Vegetation, and
3. Soil characteristics

1. An area meets the Corps' wetland hydrology criterion if the area is covered or saturated with water for at least 5% of the growing season in most years.

2. Some of the more common wetland indicator species are Bald Cypress (*Taxodium distichum*), Ironwood/Musclewood (*Carpinus caroliniana*), Buttonbush (*Cephalanthus occidentalis*), Eastern Cottonwood (*Populus deltoids*), Green Ash (*Fraxinus pennsylvanica*), American Sycamore (*Platanus occidentalis*), and Black Willow (*Salix nigra*)



7. Wetlands Delineation

Soil characteristics suggesting a wetland area appear after continued saturation of the ground for one or more weeks during the growing season. During saturation, soil microorganisms rapidly use up available oxygen, the ingredient necessary for dead plant decay. The resulting accumulation of plant matter, either in the form of peat (where plant remains are still identifiable) or muck (where the plant material is heavily decomposed and less identifiable), forms highly organic soils that may emit pungent odors and range in color from brown to reddish brown to black.

When saturation occurs for a shorter amount of time or water flow is prevalent, dead plant material may not build-up. For these areas, gleyed or mottled soils can be indicators of wetlands. Gleyed soils are gray to greenish or bluish gray in color within 18 inches of the surface, and mottled soils contain brown or yellow patches in a grayish matrix.

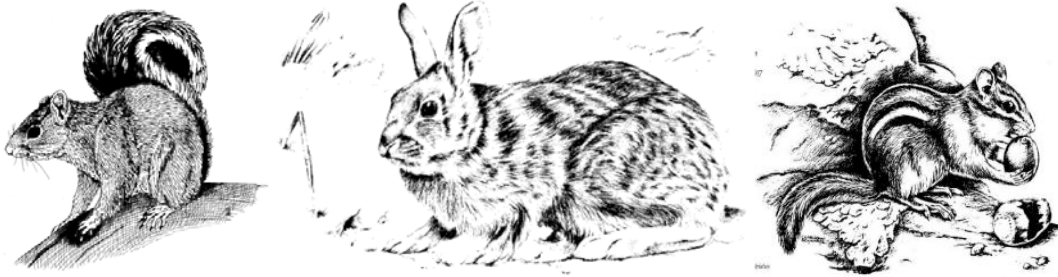
8. Pawpaw Patch

Take a moment to smell the crushed leaves of these trees. This green pepper aroma is characteristic of pawpaw trees, also called Tennessee bananas or poor man's bananas. These plants produce large pear shaped fruits that taste something like banana mixed with mango and papaya. As the only temperate members of the tropical Annonaceae family, pawpaws occur throughout the eastern U.S. on moist soils and along streams. You can recognize pawpaws by their green droopy leaves which are 6 to 10 inches long and stay green after other trees have changed color.



9. Wildlife Identification

This forest is home to a diversity of wildlife. Amphibians, reptiles, birds, and mammals all find their niche in this area. Eastern gray squirrels (one of the most frequently seen mammals in the southeast), eastern cottontail rabbits (who stand on their hind feet to watch for predators), and eastern chipmunks (which use pouches in their cheeks to transport food), are among the more prevalent critters you may see on a daily hike. Cottontails can often be startled in the woods or grasslands and will run to safety, while surprised chipmunks will often return to their extensive burrow systems to hide. Squirrels, on the other hand, prefer climbing trees to safety.



At night, you would be much more likely to see a different group of animals. Opossums, raccoons, and skunks, are all nocturnal – or active at night. These three species are often considered pesks, but they perform important ecological roles. They provide food for hawks, owls, coyotes, and wolves, while eating insects, small mammals, bird eggs, and amphibians, among other things. They are also unique in their own right. The opossum is the only pouched mammal, or marsupial, in North America, while skunks are capable of spraying an odorous, oily, yellowish musk 10-15 inches that results in intense pain and loss of vision to protect themselves. Furthermore, raccoons are surprisingly curious and can use their almost human-like forepaws to climb and pry open prey.



Virginia Opossum



Raccoon



Striped Skunk

10. Impact of Forests on Water

Trees found along waterways, such as these surrounding the edge of the pond, play an influential role in aquatic ecosystems. Shade provided by the trees cool the water allowing it to hold more oxygen, an element essential for fish survival. The shade also serves as fish habitat where fallen leaves add nutrients to the water. These leaves, along with fallen trees and exposed roots, also supply surfaces for insects to live on. Furthermore, intertwined root mats protect stream banks from erosion caused by the flowing water. It is important to protect the habitats surrounding bodies of water because they not only sustain water levels during dry periods by slowly filtering rainwater, but also because they are home to, or beneficial for, a variety of wildlife.

11. Snag Habitats

Dead trees like this one are called snags. Their existence is vital to the thousands of living organisms that use snags for food, shelter, and perching.

- a. Termites, ants, and some beetles eat the dead wood, while woodpeckers, raccoons, and many other animals feed off these insects and their larvae.
- b. Loose bark provides shelter for beetles, salamanders, and tree frogs, and bats use the area to roost.
- c. Tree holes supply nesting grounds or shelter to nearly one-third of the bird and mammal population in a forest. Other animals store food in these holes.

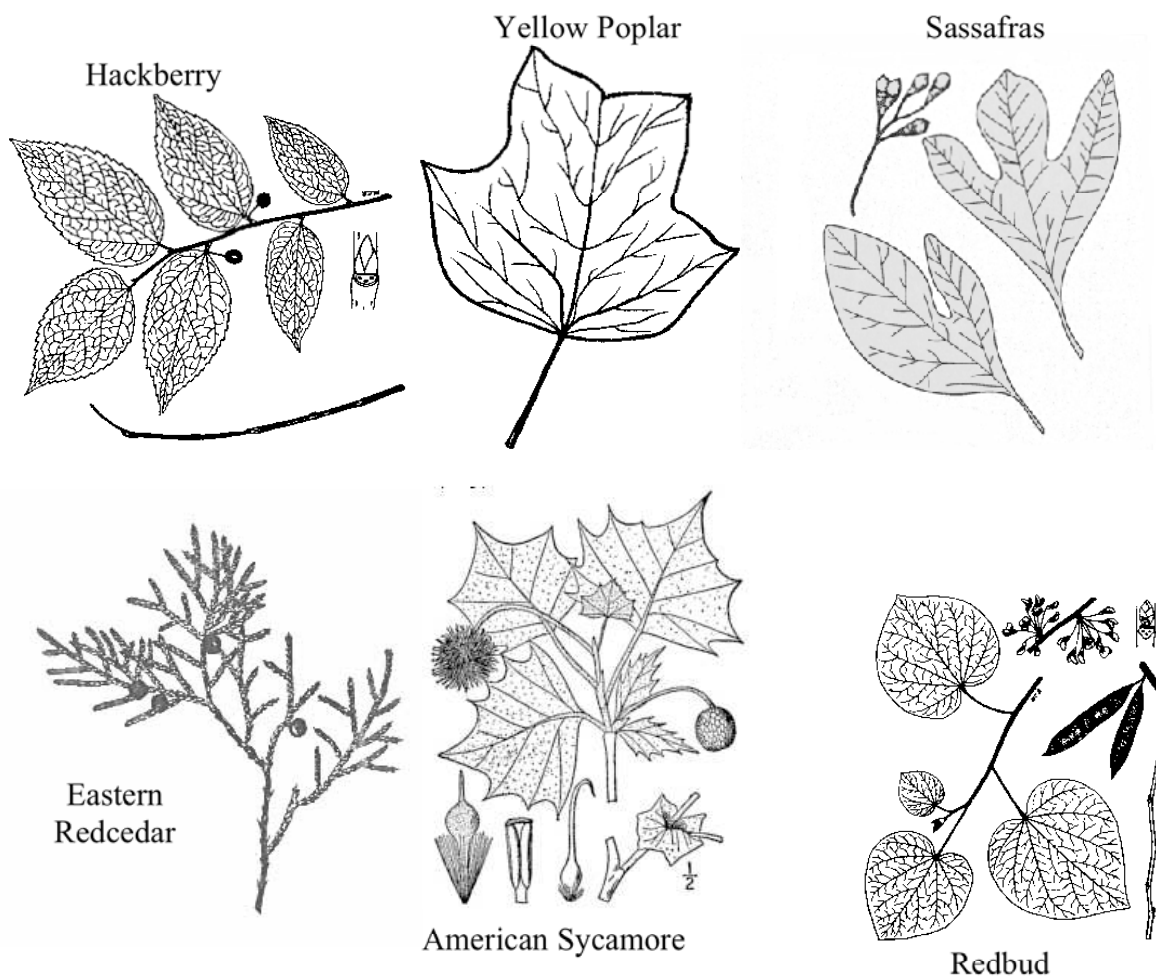
Aside from these functions, snags are also excellent perching spots. Predatory birds like owls and ospreys can find their prey from these leafless areas and songbirds have a clear view of incoming predators.



12. Native Tennessee Trees

Tennessee is home to a large diversity of tree species due to the many landforms and soil types found here. While not all common TN trees are native, the following are the more prevalent, native ones along the nature trail and their preferred site conditions (just in case you wanted to plant some of your own!):

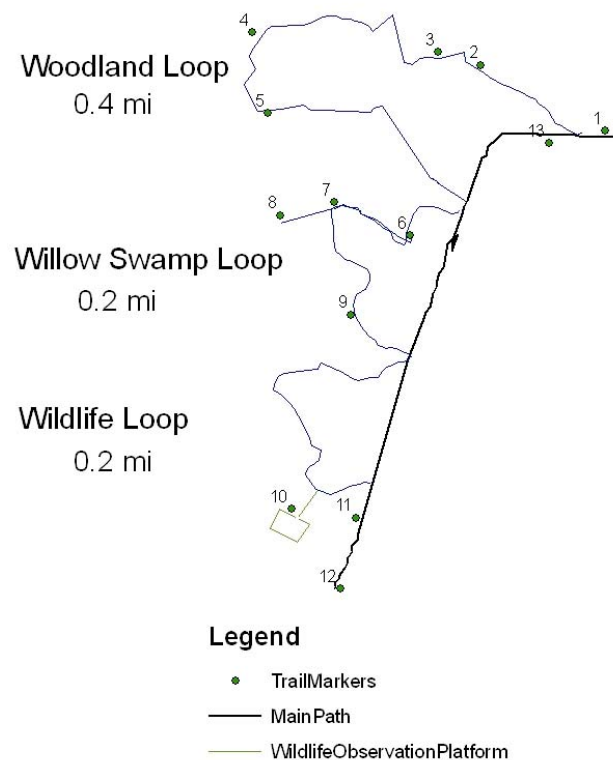
- Hackberry, *Celtis occidentalis* – occurs on rich, moist soils, but can occur on drier sites and limestone outcrops, fruit is eaten by wild turkeys, mocking birds, and fox squirrels
- Tulip or Yellow Poplar *Liriodendron tulipifera* – shade intolerant, prefers rich soils, moist slopes, and coves, one of the straightest and tallest trees, used as dens by bears
- Sassafras *Sassafras albidum* – shade intolerant, can grow on dry sites but prefers moist, well-drained soils, used for tea and dye and is considered one of the first colonial exports
- Redbud *Cersis canadensis* – shade intolerant, prefers moist stream banks & bottom lands, a small tree with white or pink flowers that grow out of the trunk, branches & twigs
- Eastern Red-Cedar *Juniperus virginiana* – shade intolerant, prefers dry uplands, heavy clays and neutral soils, among the first to colonize a recently disturbed site
- American Sycamore *Platanus occidentalis* – shade intolerant, prefers low slopes and stream bottoms, largest eastern hardwood tree, provides habitat for waterfowl



13. Pit and Mound Topography

This area will one day become another example of pit and mound topography. As trees are uprooted due to wind or other forces, topsoil and subsoil cling to the roots. When this happens, a large crater is left in the ground where the tree once stood. After several decades, the roots decay forming a mound beside the crater-pit.

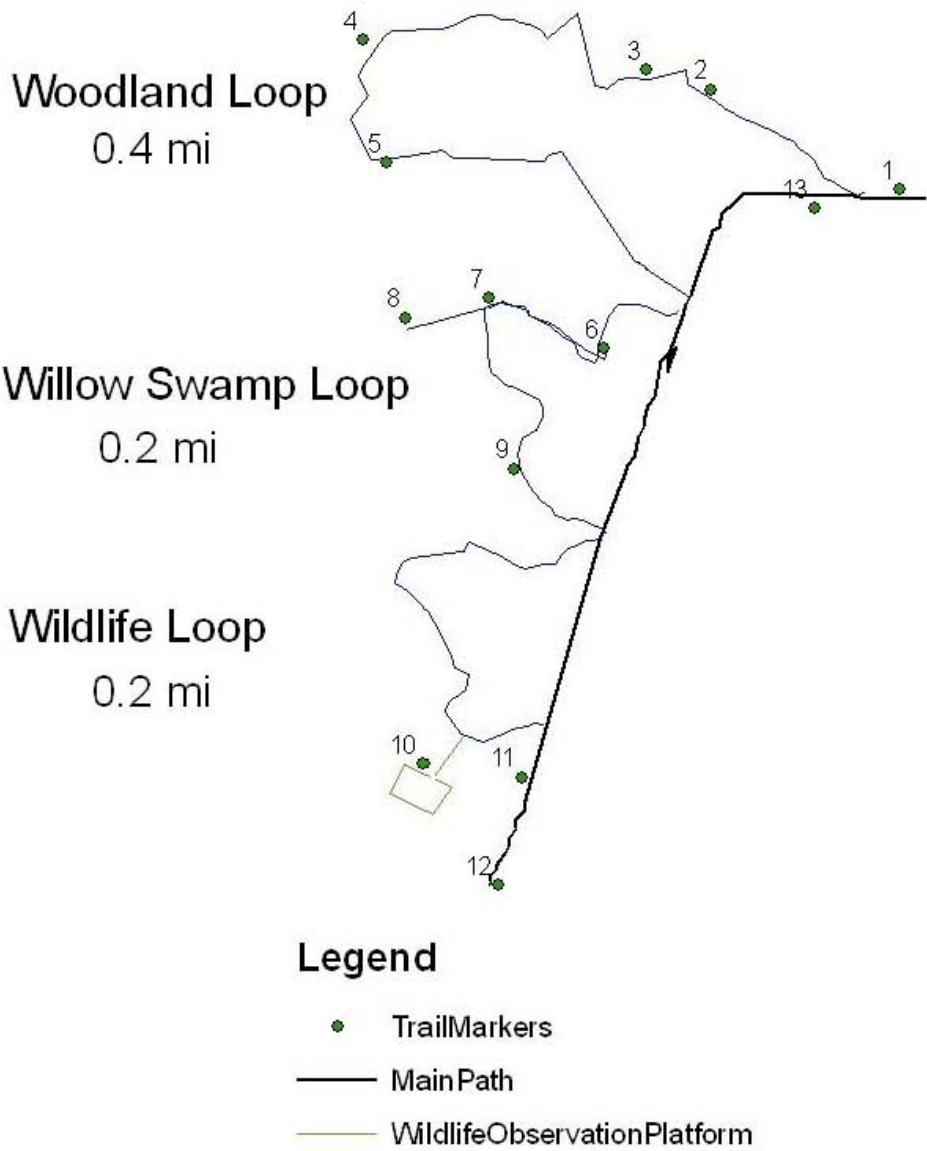
This type of topography is an important part of the forest ecosystem. Both the pit and mound provide different micro-environments that support a diversity of plant and animal life. Mounds provide an elevated area above the water table where trees and wildflowers that prefer well-drained soils thrive. Pits, on the other hand, fill with water in spring and provide habitat for water-loving or hydrophilic species. In addition, pits also serve as breeding locations for many reptiles and amphibians.



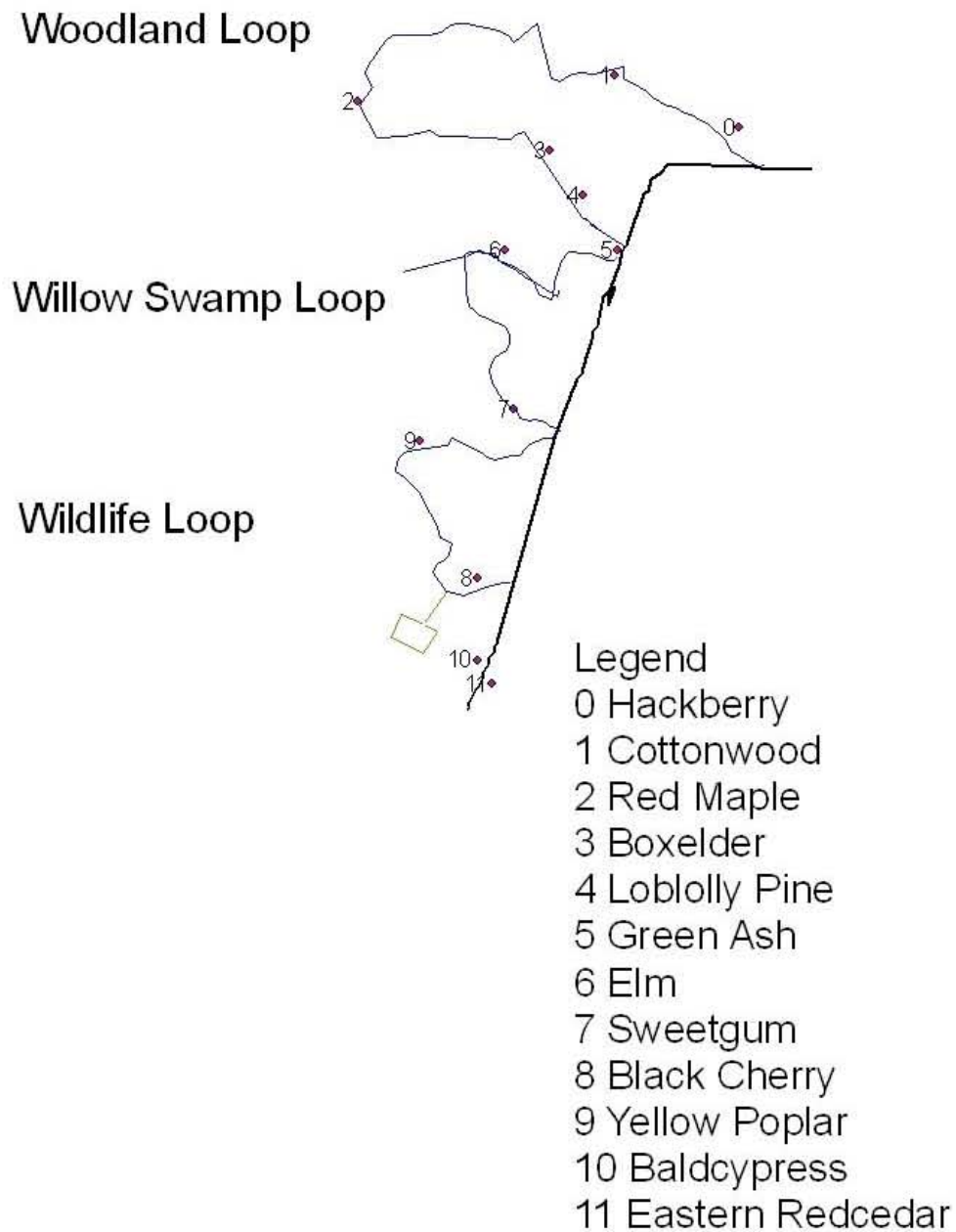
Appendix 8. Example of a trail marker (Harbison State Forest, Columbia, SC).



Appendix 9. Placement of markers for self-guided tours.



Appendix 10. Placement of tree identifiers.



Appendix 11. Current trailhead.



Appendix 12. Self-guided tour packet container: Standard Outdoor Brochure Box from Sanzo Specialties, Inc.



Appendix 13. Self-guided tour packet container: Deluxe Outdoor Brochure Box from Sanzo Specialties, Inc.



Appendix 14. Brochure to attract community organizations to the trail.

This brochure seeks to explain why a visit to the Old Hickory Nature Trail is a beneficial experience for folks of all ages and abilities!

The Army Corps of Engineers takes pride not only in maintaining a safe, user-friendly trail ...



but also in providing information about the natural resource features unique to middle Tennessee!



Driving Directions from Nashville:

- Head N on I-65 to Old Hickory Blvd / Rt. 45 exit
- Head south on Rt. 45 across Gallatin Road and the Cumberland River
- Take the second left (onto Bridgeway Ave) after crossing the CR bridge
- Turn left onto Ensley Ave and continue to Swinging Bridge Road
- Take a left at Swinging Bridge Road
- Take the second right on Cinder Road
- Nature Trail is on the left, swim beach and picnic areas is on the right, dam is straight ahead

For more information or to reserve the trail or lock and dam for your tour, contact:

No. 5 Power Plant Road
Hendersonville, Tennessee 37075
Phone: (615) 822-4846 or (615) 847-2395

The Old Hickory Nature Trail
at Old Hickory Lake,
Davidson County, TN:

A fun, educational experience
for people of all ages



Trail owned and maintained by the
US Army Corps of Engineers



Reasons to consider the Old Hickory Nature Trail for your educational field trip

- It is in close proximity to Nashville
 - ~ 1/2 hour NE via I -65
- The area contains 3 trails that showcase different biological features
 - Allows large groups to be split up to enhance learning
- There are a host of other amenities at the nature trail
 - A swim area and beach
 - Restrooms
 - Boat launch ramp
 - Picnic shelter and tables
 - Playground



- It is virtually free!
 - No charge for nature trail or boat launch access; however, the swim beach and picnic area require a \$4.00/person charge
- Your group will learn interactively in a beautiful and unique setting about topics such as:
 - Native Tree Species
 - Pit and Mound Topography
 - Mosquitoes
 - Edge Habitat



This setting provides an experience that many urbanites rarely get the opportunity to encounter, yet many want to repeat.

- The trail has been awarded at both the state and national levels
 - Designated a National Recreation Trail
 - Recognized in the Tennessee Heritage Trails guidebook
- There are several other educational attractions nearby
 - Old Hickory Lock and Dam – tours available by request
 - The Hermitage – tours available by request



Thank you for considering a visit to the Old Hickory Nature Trail!

Appendix 15. Brochure to attract school groups to the trail.

This brochure seeks to explain why a visit to the Old Hickory Nature Trail is a beneficial experience for any school-age group.

The Army Corps of Engineers not only takes pride in maintaining a safe, user-friendly trail that provides information about natural resource features unique to middle Tennessee ...



but also has some of the friendliest rangers around. Our rangers are always happy to answer questions and give demonstrations.



- Driving Directions from Nashville:
- Head N on I-65 to Old Hickory Blvd / Rt. 45 exit
- Head south on Rt. 45 across Gallatin Road and the Cumberland River
- Take the second left (onto Bridgeway Ave) after crossing the CR bridge
- Turn left onto Ensley Ave and continue to Swinging Bridge Road
- Take a left at Swinging Bridge Road
- Take the second right on Cinder Road
- Nature Trail is on the left, swim beach and picnic areas is on the right, dam is straight ahead

For more information or to reserve the trail
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 - A swim area and beach
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 - Boat launch ramp
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 - Playground



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 - No charge for nature trail or boat launch access; however, the swim beach and picnic area require a \$4.00/person charge
- Your group will learn interactively in a beautiful and unique setting about topics such as:
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 - Pit and Mound Topography
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 - Edge Habitat



This setting provides an experience that many urbanites rarely get the opportunity to encounter, yet many want to repeat.

- The trail has been awarded at both the state and national levels
 - Designated a National Recreation Trail
 - Recognized in the Tennessee Heritage Trails guidebook
- There are several other educational attractions nearby
 - Old Hickory Lock and Dam – tours available by request
 - The Hermitage – tours available by request



Thank you for considering a visit to the Old Hickory Nature Trail!

We look forward to answering your questions and hope to see you soon!

Appendix 16. Mailing list for Nashville area and surrounding schools

Abintra Montessori School
914 Davidson Drive, Nashville, TN 37205

Amqui Elementary School - Office
319 Anderson Lane, Nashville, TN 37201

Bass W A Middle School - Office
5200 Delaware Avenue, Nashville, TN 37209

Bellevue Middle School - Guidance
655 Colice Jeanne Road, Nashville, TN 37221

Berry Elementary School
2233 Winford Avenue, Nashville, TN 37211
(615) 291-6351

Binkley Norman Elementary School - Office
4700 West Longdale Drive, Nashville, TN 37211

Brick Church Middle School - Office
2835 Brick Church Pike, Nashville, TN 37207

Bowman Hills Adventist School
300 Westview Avenue, Nashville, TN 37205
(423) 476-6014

Brookmeade Elementary School - Office
1015 Davidson Drive, Nashville, TN 37205
(615) 353-2000

Charlotte Park Elementary School - Office
480 Annex Avenue, Nashville, TN 37209
(615) 353-2006

Cockrill Elementary School - Office
4701 Indiana Avenue, Nashville, TN 37209
(615) 298-8075

Cookies and Cream Daycare
905 Clay Street, Nashville, TN 37208
(615) 244-6644

Creative Academy
2600 Heiman Street, Nashville, TN 37208
(615) 254-9845

Crieve Hall Elementary School - Office
498 Hogan Road, Nashville, TN 37220
(615) 333-5059

Croft Middle School - Office
482 Elysian Fields Road, Nashville, TN 37211
(615) 332-0217

Cumberland Elementary - Office
4247 Cato Road, Nashville, TN 37218
(615) 291-6370

Dalewood Middle School
1460 McGavock Pike, Nashville, TN 37216
(615) 227-5930

David Lipscomb Campus School - Elementary School & Kindergarten Office
3901 Granny White Pike, Nashville, TN 37204
(615) 269-1783

Davidson Academy - Administration
Nashville, TN 37201
(615) 860-5300

DCA Extended Day
300 Danyacrest Drive, Nashville, TN 37214
(615) 889-8564

Donelson Christian Academy
300 Danyacrest Drive, Nashville, TN 37214
(615) 883-2926

Donelson Middle School - Office
110 Stewarts Ferry Pike, Nashville, TN 37214
(615) 884-4080

Eakin Day Care
2500 Fairfax Avenue, Nashville, TN 37212
(615) 298-8062

Eakin Elementary School - Eakin Primary Office
2500 Fairfax Avenue, Nashville, TN 37212
(615) 298-8073

East Academy School Inc
108 Chapel Avenue, Nashville, TN 37206
(615) 228-2284

Ensworth School
211 Ensworth Place, Nashville, TN 37205
(615) 383-0661

Ewing Park Middle School - Office
3410 Knight Drive, Nashville, TN 37207
(615) 876-5115

Extended School Program at Glendale
800 Thompson Avenue, Nashville, TN 37204
(615) 292-1789

Father Ryan High School
700 Norwood Drive, Nashville, TN 37204
(615) 383-4200

Franklin Road Academy - Middle School
4700 Franklin Pike, Nashville, TN 37220
(615) 831-6959

Gateway Elementary School - Office
1524 Monticello Drive, Nashville, TN 37207
(615) 860-1465

Glencliff Comprehensive High School - Office
160 Antioch Pike, Nashville, TN 37211
(615) 333-5070

Glencliff Elementary School - Office
120 Antioch Pike, Nashville, TN 37211
(615) 333-5105

Glendale Elementary School
800 Thompson Avenue, Nashville, TN 37204
(615) 279-7970

Glengarry Elementary School
200 Finley Drive, Nashville, TN 37217
(615) 360-2903

Gower Elementary School - Office
650 Old Hickory Boulevard, Nashville, TN 37209
(615) 353-2012

Gra-Mar Middle School
575 Joyce Lane, Nashville, TN 37216
(615) 262-6687

Granbery Elementary School - Office
5501 Hill Court, Nashville, TN 37220
(615) 333-5112

Green Alex Elementary School - Office
3921 Lloyd Road, Nashville, TN 37201
(615) 876-5105

Harding Academy - Main Office
130 Harding Place, Nashville, TN 37205
(615) 356-5510

Harpeth Hall School - Middle School
3801 Hobbs Road, Nashville, TN 37215
(615) 297-8578

Harpeth Valley Elementary School - Office
7840 Old Harding Road, Nashville, TN 37221
(615) 662-3015

Haywood Elementary School - Office
3790 Turley Drive, Nashville, TN 37211
(615) 333-5118

Hickman Elementary School - Office
112 Stewarts Ferry Pike, Nashville, TN 37214
(615) 884-4020

Hill H G Middle School - Office
150 Davidson Road, Nashville, TN 37205
(615) 353-2020

Hillwood Comprehensive High School - Office
400 Davidson Road, Nashville, TN 37205
(615) 353-2025

Hull-Jackson Montessori Magnet - Office
1015 Kellow Street, Nashville, TN 37208
(615) 291-6601

Hume-Fogg Magnet - Office
700 Broadway, Nashville, TN 37203
(615) 291-6300

Hunters Lane High School
1150 Hunters Lane, Nashville, TN 37207
(615) 860-1401

Inglewood Elementary School
1700 Riverside Drive, Nashville, TN 37216

Jenkins F H Elementary School
814 Youngs Lane, Nashville, TN 37207
(615) 228-8827

John Early Paideia Middle Magnet
1000 Cass Street, Nashville, TN 37208

Joy Tom Elementary School - Office
2201 Jones Avenue, Nashville, TN 37207
(615) 262-6724

Kindercare Learning Centers - Bellevue, Nashville
241 Old Hickory Boulevard, Nashville, TN 37221
(615) 662-0666

King Martin Luther Jr Magnet School - Office
613 17th Avenue North, Nashville, TN 37203
(615) 329-8400

Kirkpatrick Elementary School - Office
1000 Sevier Street Suite 2, Nashville, TN 37206
(615) 262-6708

Lipscomb Elementary School
8011 Concord Road, Nashville, TN 37201
(615) 371-9727

Litton Isaac Middle School - Office
4601 Hedgewood Drive, Nashville, TN 37216
(615) 262-6700

Lockeland Elementary School - Office
105 South 17th Street, Nashville, TN 37206
(615) 258-1330

Madison Academy
100 Academy Square, Nashville, TN 37210
(615) 865-4055

Madison Campus Elementary School of S D A
1515 Sutherland Drive, Nashville, TN 37201
(615) 865-4575

Madison Nazarene Christian Academy
503 Lanier Drive, Nashville, TN 37201
(615) 865-2746

Madison School
300 Old Hickory Boulevard, Nashville, TN 37221
(615) 612-2545

McGavock Elementary School - Office
275 McGavock Pike, Nashville, TN 37214
(615) 885-8912

McMurray Middle School - Office
520 McMurray Drive, Nashville, TN 37211
(615) 333-5126

Metro Christian Academy
730 Neelys Bend Road, Nashville, TN 37201

Neely's Bend Elementary School - Office
1300 Neelys Bend Road, Nashville, TN 37201
(615) 860-1471

Neely's Bend Middle School - Office
1251 Neelys Bend Road, Nashville, TN 37201
(615) 860-1477

Oak Hill School
4815 Franklin Pike, Nashville, TN 37128
(615) 297-6544

Old Center Elementary School - Office
3230 Brick Church Pike, Nashville, TN 37207
(615) 258-1053

Oliver Middle School
6211 Nolensville Pike, Nashville, TN 37211
(615) 332-3011

Overbrook School
4210 Harding Pike Suite 1, Nashville, TN 37205
(615) 292-5134

Overton Comprehensive High School - Office
4820 Franklin Pike, Nashville, TN 37220

Paragon Mills Elementary School - Office
260 Paragon Mills Road, Nashville, TN 37211
(615) 333-5170

Park Avenue Christian School
4300 Park Avenue, Nashville, TN 37209
(615) 383-9681

Pegram Elementary School
4552 Dogwood Lane, Nashville, TN 37201

Pennington Elementary School - Office
2817 Donna Hill Drive, Nashville, TN 37214
(615) 885-8918

Percy Priest Elementary School - Office
1700 Otter Creek Road, Nashville, TN 37215
(615) 298-8416

Pioneer Christian Academy
4479 Jackson Road, Nashville, TN 37201
(615) 876-7291

Rose Park Middle - Office
1025 9th Avenue South, Nashville, TN 37203
(615) 291-6405

Rosebank Elementary School - Office
1012 Preston Drive, Nashville, TN 37206
(615) 262-6720

Shayne Elementary School - Office
6217 Nolensville Pike, Nashville, TN 37211
(615) 332-3020

Shwab Elementary School
1500 Dickerson Pike, Nashville, TN 37207

St Ann's Catholic School
5105 Charlotte Pike, Nashville, TN 37209
(615) 269-0568

St Cecilia Academy
4210 Harding Pike Suite 2, Nashville, TN 37205
(615) 298-4525

St Edward Church - School
190 Thompson Lane, Nashville, TN 37211

St Henry's School - Office
6401 Harding Pike, Nashville, TN 37205
(615) 352-1328

St Joseph School
1225 Gallatin Avenue, Nashville, TN 37206
(615) 865-1491

St Matthew Catholic School
535 Sneed Road, Nashville, TN 37221
(615) 662-4044

St Paul Christian Academy
5035 Hillsboro Pike, Nashville, TN 37215
(615) 269-4751

St Pius X School
2750 Tucker Road, Nashville, TN 37218
(615) 255-2049

St Vincent de Paul School
1704 Heiman Street, Nashville, TN 37208
(615) 320-1374

Stanford Montessori School - Office
2417 Maplecrest Drive, Nashville, TN 37214
(615) 885-8822

Stratford Comprehensive High School
1800 Stratford Avenue, Nashville, TN 37216

Stratton Elementary School
310 Old Hickory Boulevard, Nashville, TN 37221

Sumner County Schools - Goodpasture B C Christian School, High School
Nashville, TN 37201
(615) 868-3700

Tusculum Elementary School
4917 Nolensville Pike, Nashville, TN 37211

Two Rivers Middle School - Office
2991 McGavock Pike, Nashville, TN 37214
(615) 885-8931

Una Elementary School
2018 Murfreesboro Pike, Nashville, TN 37217

Warner Elementary
626 Russell Street, Nashville, TN 37206

West End Middle School - Guidance, Office
3529 West End Avenue, Nashville, TN 37205
(615) 298-8425

West Nashville Cumberland Presbyterian Church - School
6849 Charlotte Pike, Nashville, TN 37209
(615) 352-2801

Westmeade Elementary School
6641 Clearbrook Drive, Nashville, TN 37205

Whites Creek Comprehensive High School - Office
7277 Old Hickory Boulevard, Nashville, TN 37201
(615) 876-5132

Whitsitt Elementary School - Office
110 Whitsett Road, Nashville, TN 37210
(615) 333-5600

Woodbine Christian Academy
2204 Foster Avenue, Nashville, TN 37210
(615) 254-7588

Wright Middle School - Office
180 McCall Street, Nashville, TN 37211

Anderson Jack Elementary School
250 Shute LN, Hendersonville, TN 37075

Beech Elementary
3120 Long Hollow Pike, Hendersonville, TN 37075
(615) 824-2700

Beech High School
3126 Long Hollow Pike, Hendersonville, TN 37075
(615) 824-6200

Benny C Bills Elementary
1030 Union School Rd, Gallatin, TN 37066
(615) 451-6577

College Heights Christian Academy
2100 Nashville Pike, Gallatin, TN 37066
(615) 452-4988

Dupont Elementary School: Office
1311 9th St, Old Hickory, TN 37138
(615) 847-7305

Dupont-Hadley Middle School: Office
1901 Old Hickory Blvd, Old Hickory, TN 37138
(615) 847-7300

Dupont-Tyler Middle School: Office
431 Tyler Dr, Hermitage, TN 37076
(615) 885-8827

East Robertson Elementary School: Office
5177 E Robertson Rd, Cross Plains, TN 37049
(615) 654-3874

East Robertson High School
158 Kilgore Trce, Cross Plains, TN 37049
(615) 654-2191

Ellis Middle School
100 Indian Lake Rd, Hendersonville, TN 37075
(615) 264-6093

Gallatin High School
700 Dan P Herron Dr, Gallatin, TN 37066
(615) 452-2621

Gene w Brown Elementary School: Office
115 Gail Dr, Hendersonville, TN 37075
(615) 824-8633

Goodlettsville Elementary School: Office
514 Donald St, Goodlettsville, TN 37072
(615) 859-8950

Goodlettsville Middle School: Office
300 S Main St, Goodlettsville, TN 37072
(615) 859-8956

Guild Elementary School: Office
1018 S Water Ave, Gallatin, TN 37066
(615) 452-5583

Hawkins Middle School: Office
487 Walton Ferry Rd # A, Hendersonville, TN 37075
(615) 824-3456

Hendersonville Christian Academy
355 Old Shackle Island Rd, Hendersonville, TN 37075
(615) 824-1549

Hendersonville High School: Office
123 Cherokee Rd, Hendersonville, TN 37075
(615) 824-6162

Hermitage Elementary School: Office
3800 Plantation Dr, Hermitage, TN 37076
(615) 885-8838

Honeysuckle Montessori School
112 Honeysuckle Dr, Hendersonville, TN 37075
(615) 264-1235

Howard School: Office
805 Long Hollow Pike, Gallatin, TN 37066
(615) 452-3025

Hunter Middle School
3140 Long Hollow Pike, Hendersonville, TN 37075
(615) 822-4720

Indian Lake Elementary School
505 Indian Lake Rd, Hendersonville, TN 37075
(615) 824-6810

Lakeside Park Elementary School: Office
204 Dolphus Dr, Hendersonville, TN 37075
(615) 824-5151

Merrol Hyde Magnet School
128 Township Dr, Hendersonville, TN 37075
(615) 264-6543

Millersville Elementary School
1248 Louisville Hwy, Goodlettsville, TN 37072
(615) 859-1439

Montessori Country Day School
162 New Shackle Island Rd, Hendersonville, TN 37075
(615) 264-3401

Mt Juliet Elementary School
2521 W Division St, Mt Juliet, TN 37122
(615) 758-5654

Neely's Bend Elementary School: Office
1300 Neelys Bend Rd, Madison, TN 37115
(615) 860-1471

Old Center Elementary School: Office
1245 S Dickerson Rd, Goodlettsville, TN 37072
(615) 859-8968

Pope John Paul II High School
117 Caldwell Dr, Hendersonville, TN 37075
(615) 822-2375

Presbyterian Day School Inc
172 W Main St, Hendersonville, TN 37075
(615) 824-8604

Ridgetop Seventh Day Adventist Church: Elementary School
102 King St, Greenbrier, TN 37073
(615) 859-0259

Ruby Major Elementary School
5141 John Hager Rd, Hermitage, TN 37076
(615) 232-2203

Rucker Stewart Middle School: Office
350 Hancock St, Gallatin, TN 37066
(615) 452-1734

Shafer Middle School: Office
240 Albert Gallatin Ave, Gallatin, TN 37066
(615) 452-9100

Southside Christian School
1028 S Water Ave, Gallatin, TN 37066
(615) 452-5952

Station Camp High School
240 Albert Gallatin Ave, Gallatin, TN 37066
(615) 451-6551

Sumner Academy
464 Nichols LN, Gallatin, TN 37066
(615) 452-1914

Tulip Grove Elementary School
441 Tyler Dr, Hermitage, TN 37076
(615) 885-8944

Union Elementary School: Office
516 Carson St, Gallatin, TN 37066
(615) 452-0737

Vena Stuart Elementary School
780 Hart St, Gallatin, TN 37066
(615) 452-1486

Walton Ferry Elementary School: Office
732 Walton Ferry Rd, Hendersonville, TN 37075
(615) 824-3217

Wessington Place Elementary School: Office
140 Scotch St, Hendersonville, TN 37075
(615) 824-3258

White House Christian Academy
205 Spring St, White House, TN 37188
(615) 672-9422

White House Middle School
2020 Highway 31 W, White House, TN 37188
(615) 672-4379

White House High School
508 Tyree Springs Rd, White House, TN 37188
(615) 672-3761

Wilson E B High School
102 Indian Lake Rd, Hendersonville, TN 37075
(615) 264-6085

Woodall Robert F Primary School
300 Edenway Dr, White House, TN 37188
(615) 672-7772

Appendix 17. Brochure mailing list for community organizations.

Agricultural Extension Service: 4-H Urban Youth and Development
800 2nd Ave N, Nashville, TN 37201
(615) 862-5995

Ashland City Senior Citizens Center
104 Ruth Dr, Ashland City, TN 37015
(615) 792-3629

Boy Scouts Troop 87
121 Davidson Rd, Nashville, TN 37205
(615) 352-7287

Boy Scouts Troop 407
840 Kenny St, Gallatin, TN 37066
(615) 230-8045

Boy Scouts of America
3414 Hillsboro Pike, Nashville, TN 37215
(615) 383-9724

Chamber of Commerce
46 W Caldwell St, Mt Juliet, TN 37122
(615) 758-3478

Cleveland Community Center
N 6th St & Bayard, Nashville, TN 37201
(615) 862-8444

Crievewood Baptist Church: Christian Recreation Center
480 Hogan Rd, Nashville, TN 37220
(615) 832-5804

Douglas SR Citizen Center
210 N 7th St, Nashville, TN 37201
(615) 862-8446

East Community Center
700 Woodland St, Nashville, TN 37206
(615) 862-8448

Elizabeth Park SR Citizen Center
1701 Arthur Ave, Nashville, TN 37208
(615) 862-8449

Gallatin Chamber of Commerce
118 W Main St, Gallatin, TN 37066
(615) 452-4000

Goodlettsville Chamber of Commerce
117 N Main St # A, Goodlettsville, TN 37072
(615) 859-7979

Green Hills Recreation Center
1200 Lone Oak Rd, Nashville, TN 37215
(615) 298-5164

Hadley Park Community Center
28th Avenue N & John, Nashville, TN 37212
(615) 862-8451

Hartman Community Center
2801 Tucker Rd, Nashville, TN 37218
(615) 254-6531

Hendersonville Chamber of Commerce
101 Wessington pl, Hendersonville, TN 37075
(615) 824-2818

Hermitage Community Center
3720 James Kay LN, Hermitage, TN 37076
(615) 316-0843

Lebanon City Recreation Dept
416 Baird Park Cir, Lebanon, TN 37087
(615) 449-0303

Lebanon Skate & Recreation Center
1649 Murfreesboro Rd, Lebanon, TN 37090
(615) 449-9860

Madison Chamber of Commerce
301 Madison St, Madison, TN 37115
(615) 865-5400

Madison Community Center
510 Cumberland Ave, Madison, TN 37115
(615) 862-8459

Melrose Recreation Center
12966 Old Hickory Blvd, Antioch, TN 37013
(615) 641-6136

Morgan Community Center
411 Hume St, Nashville, TN 37208
(615) 862-8462

Mt Juliet Community Center
1075 Charlie Daniels Pkwy, Mt Juliet, TN 37122
(615) 758-6522

Napier Community Center
73 Fairfield Ave, Nashville, TN 37210
(615) 256-4474

Nolensville Recreation Center
7248 Nolensville Rd, Nolensville, TN 37135
(615) 776-2964

Norene Community Center
11770 Cainsville Rd, Lebanon, TN 37090
(615) 286-4350

Old Hickory Area Chamber
600 Bryan St, Old Hickory, TN 37138
(615) 847-4516

Smith County 4-H Clubs
125 Gordonsville Hwy # 300, Carthage, TN 37030
(615) 735-2900

Sumner 4-H Club Office
155 E Main St # A, Gallatin, TN 37066
(615) 452-1423

Una Recreation Center
136 Una Recreation Rd, Nashville, TN 37217
(615) 399-1872

Watkins Community Center
616 17th Ave N, Nashville, TN 37203
(615) 862-8468

West Park Community Center
6105 Morrow Rd, Nashville, TN 37209
(615) 862-8469

Williamson County 4-H Clubs
4215 Long Ln # 200, Franklin, TN 37064
(615) 790-5721

Z Alexander Looby Center
2301 Metrocenter Blvd, Nashville, TN 37228
(615) 862-8454

Appendix 18. Code for the updated Army Corps of Engineers trails website.

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the pine forest you will approach the pond. Take time on the fishing platform and observe what's going on around you.<TD WIDTH=240><TD> <TD> </TABLE>

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<CENTER>Directions</CENTER>

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(click on map for larger version)

<TD VALIGN=TOP>Driving Directions from Nashville:Head north on I-65 to the Old Hickory Blvd. / Rt. 45 exit.

Head south on Rt. 45 across Gallatin Road and the Cumberland River.

Take the second left (onto Bridgeway Ave.) after crossing the Cumberland River bridge.

Turn left onto Ensley Ave. and continue to Swinging Bridge Road.

Take a left at Swinging Bridge Road.

Take the second right (onto Cinder Road).

The Nature Trail is on the left, beach and picnic areas are on the right, and the dam is straight ahead.

Click here for a map of the trails.

</TABLE><P>

<CENTER>After visiting the trail, please feel free to enjoy the rest of the day at Old Hickory Beach! There are a host of nearby amenities, including a swim area and beach, restrooms, a boat launch ramp, picnic shelter and tables, and a playground.<P>

We invite you to come back often, as the natural world changes season-to-season and minute-by-minute.</CENTER>

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<P>

Point of Contact:<P>

Resource Manager's Office

No. 5 Power Plant Road

Hendersonville, Tennessee 37075

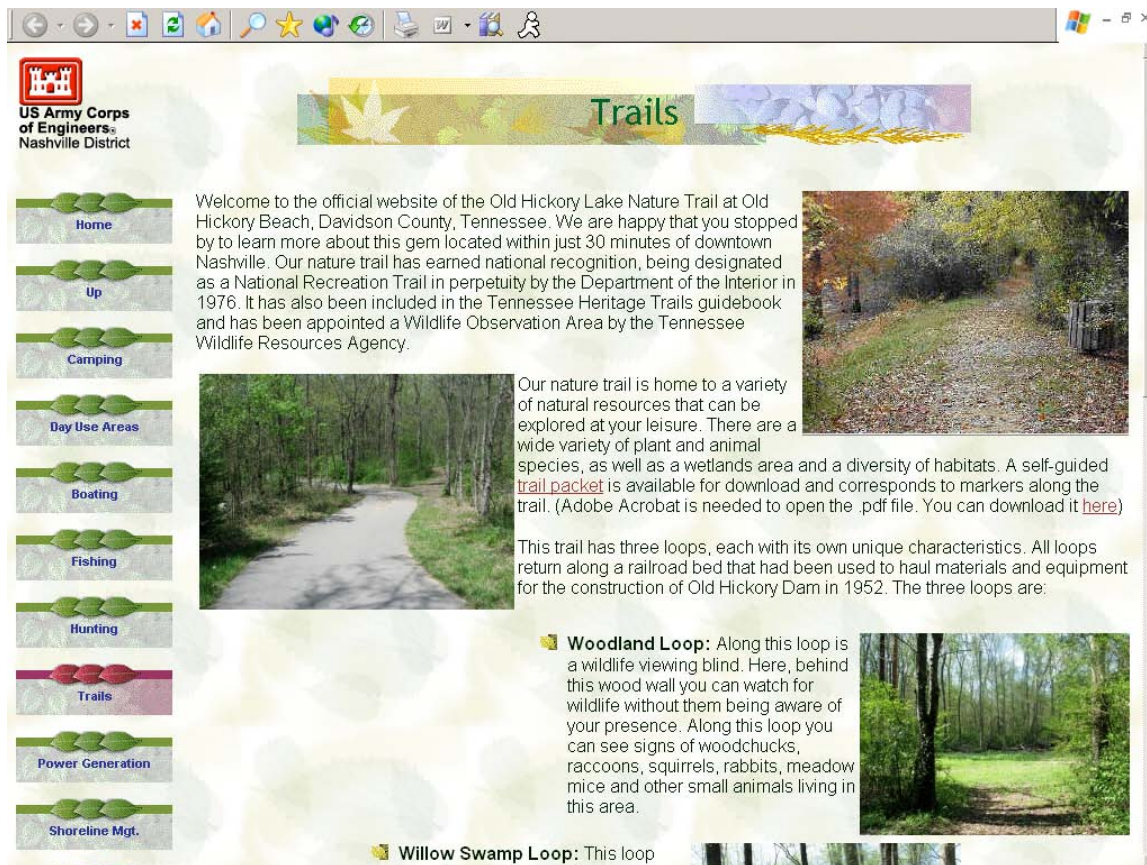
(615) 822-4846 or (615) 847-2395<P>

or e-mail: Public Affairs Officer<P>

Page last updated: 16 April 2006


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Appendix 19. Visual of the updated Army Corps of Engineers trails website.





has a boardwalk crossing an area where water drainage is poor. Stop for a time along the boardwalk. You will experience the feel of a swamp caused by high humidity. You will also notice the pungent odor of decaying vegetation, which is characteristic of swamps.



Wildlife Loop: The Corps of Engineers planted a pine forest along this loop in 1967. The pines have grown large enough to provide protection from the weather. As you leave the pine forest you will approach the pond. Take time on the fishing platform and observe what's going on around you.



Directions

Driving Directions from Nashville:

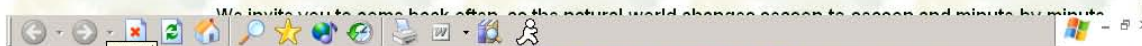
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- Turn left onto Ensley Ave. and continue to Swinging Bridge Road.
- Take a left at Swinging Bridge Road.
- Take the second right (onto Cinder Road).
- The Nature Trail is on the left, beach and picnic areas are on the right, and the dam is straight ahead.



(click on map for larger version)

Click [here](#) for a map of the trails.

After visiting the trail, please feel free to enjoy the rest of the day at Old Hickory Beach! There are a host of nearby amenities, including a swim area and beach, restrooms, a boat launch ramp, picnic shelter and tables, and a playground.



We invite you to come back often, as the natural world changes season-to-season and minute-by-minute.

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