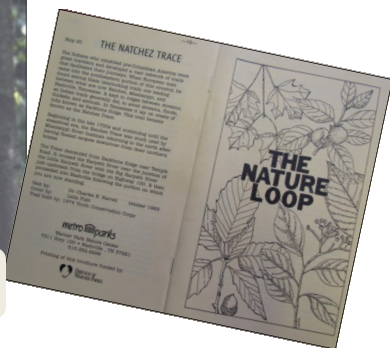


We hope you had a pleasant walk on the Nature Loop and enjoyed learning about Warner Park's diverse ecosystem and some of the wonderful things that live here.



Dr. Charles Farrell
1909-1989



An earlier version of the Nature Loop brochure was written in 1983 by Dr. Charles Farrell, and was enjoyed by many, many visitors for 30 years. In this updated version we wanted to recognize his enduring influence.

Dr. Farrell worked for the Nature Center from 1977-1987 after he retired from Vanderbilt University. He had a PhD in Zoology and was an amazing teacher and mentor. He loved everything about the natural world and was eager to share his knowledge in a fun and interesting way. We strive to carry on this tradition and hope to instill in all Park visitors a love for nature and a desire to protect the natural world as Dr. Farrell taught so well.

Brochure and photography by Deb Beazley, 2013



**WARNER PARK
NATURE CENTER**



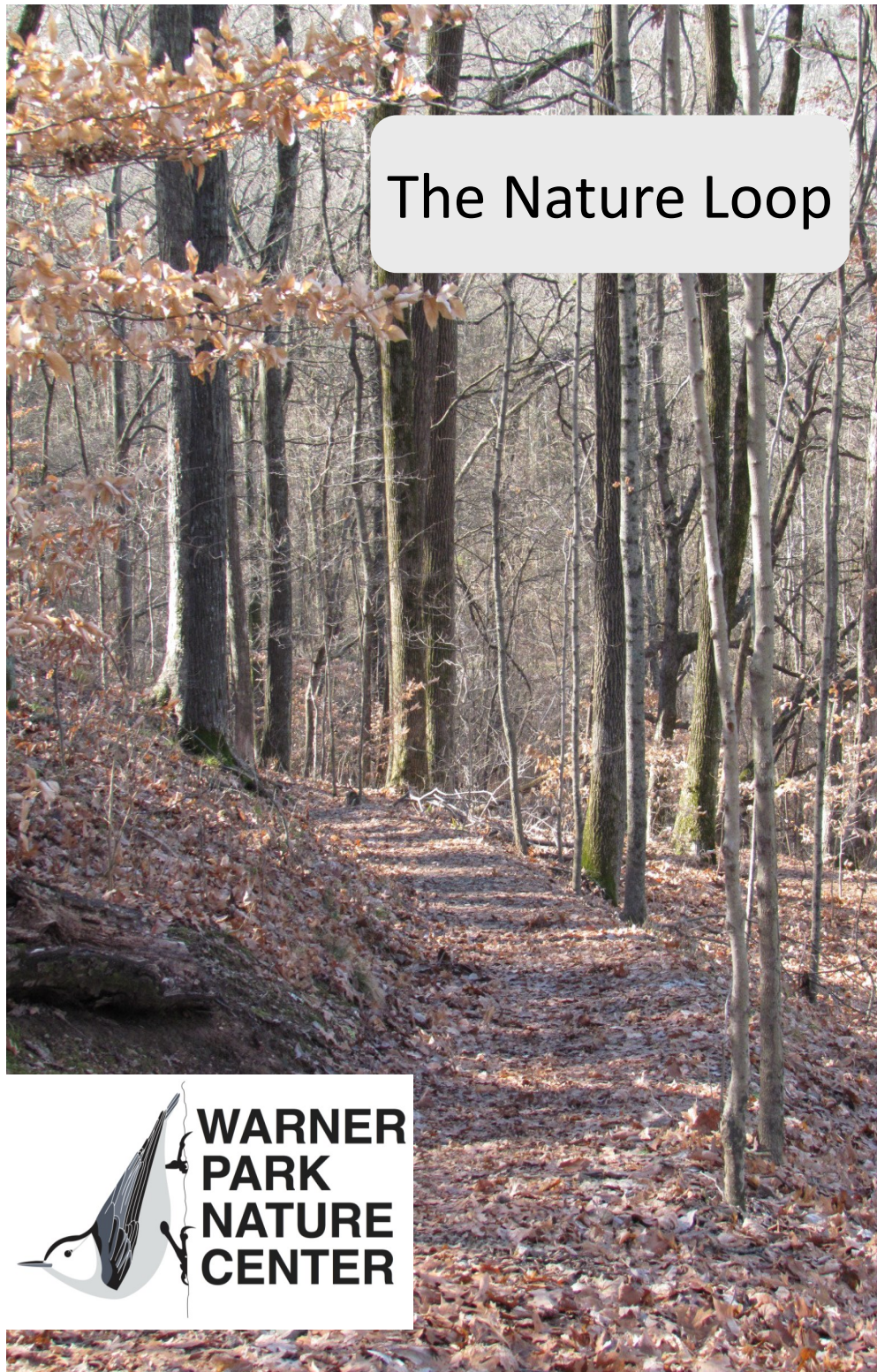
**FRIENDS
OF WARNER PARKS**

Warner Park Nature Center
7311 Highway 100
Nashville, Tennessee 37221
615-862-8555
Website: wpnc.nashville.gov
Email: wpnc@nashville.gov



**WARNER
PARK
NATURE
CENTER**

The Nature Loop



The Nature Loop is a ¾ mile trail that begins and ends at the Nature Center trailhead. Follow the yellow arrows or blazes, and find the first stop at The Old Roadway, a section of paved road now closed to motorized vehicles. Enjoy this walk through the Warner Parks forest while you follow these simple guidelines that will help to preserve these Parks for the future :

- Stay on the trail at all times
- Remove or disturb nothing
- Be watchful for wildlife, even the tiniest things can be fascinating and rewarding
- Avoid poison ivy

Stop 1. MEADOW VIEW

This road was closed to motorized vehicles in 1989 when it became known as The Old Roadway, a wonderful paved trail which the Nature Loop will cross over twice. To your left is a beautiful meadow that is fun to explore in any season. A mowed path through the meadow is nearby if you would like to take a short detour and enjoy this diverse habitat. Wildflowers are abundant in summer and fall, which attract multitudes of insects, especially butterflies, and of course spiders are everywhere too. Masses of seeds are produced that attract many birds such as sparrows, cardinals and goldfinches. Voles and mice scour the ground below for these seeds and are in turn hunted by hawks and owls. Also visible are the typical trees that sprout in the early succession of a meadow such as black walnut, tulip poplar, sassafras and persimmon. This is a lovely place to watch wildlife!



Song Sparrow

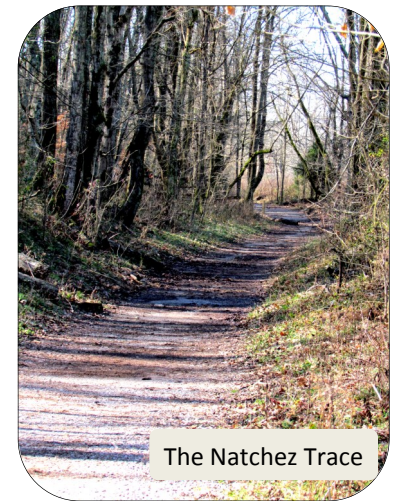


Gulf Fritillaries on Thistle

STOP 14. GO BACK IN TIME

As you walk along this last section of trail let your mind go back in time.....to the days before cars, even before steamboats, back to the 1700s. This trail would be full of people traveling on foot, horseback or wagon. Some would be coming all the way from Natchez, Mississippi after floating down the big rivers on flatboats, selling their goods and traveling back home to Nashville with their earnings for the year.

This Natchez Trace trail might have been muddy, rocky, and difficult, but most travelers were more concerned about bandits, of which there were many. Perhaps travelers thought about even earlier days when Native Americans used this very path, which was actually created long before by wood bison traveling to the salt licks at the Cumberland River.



The Natchez Trace

Today a one mile section of the historic Natchez Trace is maintained in the Parks as part of the hiking trail system. As you walk down the trail notice how much higher both sides are than the middle of the path. This is a great example of how certain sections of the Trace have worn down from years and years of use, first by animals then by people. Enjoy this walk back in time and imagine the experiences of all those that traveled this path before you.

STOP 13. VAUGHN'S CREEK

Similar to the spring you enjoyed at the top of the hill, Vaughn's creek rushes with water during wet weather and then usually dries up in the summer. The creek is still meandering and the water is still eroding soil as it has done for thousands of years and is a major factor in the geologic forces that have shaped this land. Many tree roots that originally grew underground are now exposed to open air along the creek bank, and each year many trees lose their foothold and fall. When the creek does have water you can stand on the bridge and search for water striders, water spiders, snails, stoneflies, crayfish, salamanders and fish. Of course, at night raccoons hunt along this creek looking for their favorite food, the crayfish.



Raccoon



Crayfish



Sycamore



Across the creek and to the left is a sycamore tree with the beautiful white bark at the top. They like growing along creeks and in bottomlands. Fast growing sycamores are one of the largest eastern hardwood trees; some are known to reach a diameter of over 11 feet!

Stop 2. BASEBALL AND PANCAKES

As you gaze around the woods here at mid slope of this hill you see several species of common trees. Below the trail is a large sugar maple which had three equal trunks for decades until storms in 2010 and 2011 damaged two of them. To the right and close to the trail is a large white ash with light colored bark showing long narrow valleys and ridges. Both maples and ashes are used to make baseball bats. Maple wood is very hard and dense with a tight grain, while ash wood is lighter in weight yet still strong and durable. You may see white splotches on the ash bark as a result of a harmless fungus. Most ash trees have these spots. But of course, if you like pancakes and syrup thank the sugar maple for its sweet sap that is used to make that syrup. These trees also produce the winged seeds that twirl like helicopters. Scattered in the woods below the trail are many young American beech trees, with their very smooth, light gray bark, and in winter notice they cling to their old, brown leaves. Above the trail are several oak trees, so look on the ground for acorns, and of course keep an eye out for squirrels and chipmunks searching for them.



Ash Tree



Chipmunk



Acorns

Stop 3. THE SPRING

Before you is a beautiful wet weather spring that usually runs only during the wet season. Should you be here in the winter after heavy rains, water may be gushing out of the hillside. If you visit in the summer, the spring will most likely be dry. The gully below you is evidence of many, many years of water erosion. The limestone visible around the opening of the spring is abundant beneath the surface as well. As the ground becomes saturated with rain, water finds an outlet through openings in the dissolved limestone thus creating this spring. The grand limestone frame around the spring provides the perfect habitat for mosses, liverworts, lichens and ferns, as well as a protected home for salamanders, lizards, spiders, millipedes, snails, and of course the scampering chipmunks.



PLEASE DON'T CLIMB UP THE HILL
AS YOU WILL DISTURB THIS FRAGILE HABITAT

STOP 12. WHERE THE DOGWOODS GROW

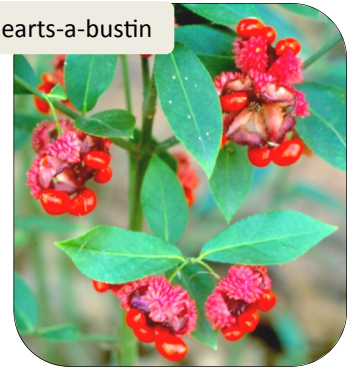
Flowering Dogwood



As you observe the woods at this stop you get a nice look at a sample of the plants that grow under the mature trees, a forest zone called the *understory*. This zone includes small trees, shrubs and vines. Understory trees include dogwoods, redbuds, blackhaws, hawthorns, carolina buckthorn, hophornbeam, american hornbeam and wild plum.

Shrubs like hearts-a-bustin, wahoo, spicebush, fragrant sumac and coralberry are found throughout the Parks, and bamboo grows here too. Many vines can be seen twining up or sticking to tree trunks. Pay special attention to a very hairy vine that grows tightly on trees, as this may be POISON IVY, especially if it has three leaves.

Hearts-a-bustin



Other vines may be virginia creeper, crossvine, trumpet creeper, greenbriar, clematis, or grapes. This zone is also where most of the non-native, invasive plants live as well. Contact the Nature Center to find out more about these plants such as privet, honeysuckle, vinca, and euonymus, that threaten the Parks ecosystem.



Virginia Creeper

STOP 11. STATELY TREE

Below the trail and to the left is a nice example of Tennessee's state tree, the tulip poplar (the one with all the little holes all over it). This tree is actually in the magnolia family, not the poplar family, and produces large colorful flowers in the spring. Look for yellow and orange petals all over the ground in March and April. Also called yellow poplar, this tree was used to make early cabins in eastern states because it grows so straight and is very resistant to insects. American Indians made canoes from them as well.



Tulip Poplar leaves and flower



Yellow-bellied Sapsucker



All of these holes were made by the yellow-bellied sapsucker. This woodpecker occurs here only in the winter, drills these little holes in trees causing the sap to flow out, which then attract insects, all of which this clever bird eats.

Next to the tulip poplar is a nice slippery elm tree. The elms bloom very early, in February, so by April they are shedding thousands of little round, papery seeds you may see blowing around or on the ground.



Elm seeds

STOP 4. DEAD BUT NOT GONE

The large dead tree above the trail is a black locust. The shelf fungus that you see higher up on the tree probably caused the disease that killed it. This particular fungus grows only on the black locust. As a perennial mushroom that gets larger and larger with age, this shelf fungus can help you identify these trees as you walk through the woods. Locust wood is very rot resistant, so this tree will likely stand here for decades. The scratches on the bark are made by male deer (bucks) that will often rub on large tree trunks to mark their territories.



Shelf Fungus

Orange Mock Oyster Mushrooms



Below the trail is a hackberry tree that a strong wind blew over in 2011. It then became a perfect food source for multitudes of fungi and bacteria that began decomposing the wood, ultimately returning the nutrients and elements back into soil. Many insects will also feed on the wood drawing woodpeckers that help speed up this process. Eventually, the dead tree will disappear and new



Maze Polypore Mushrooms

trees and shrubs will take its place.



Red-bellied Woodpecker

STOP 5. A SONG TO THE OAK

Several grand old oak trees are here near the top of the hill. They are very important trees for both wildlife and humans. Oaks produce acorns which feed many animals, including squirrels, chipmunks, foxes, raccoons, deer, birds and insects. Oak wood is used in flooring, cabinets, furniture, barrels, drums, cork, and tanning leather. Tennessee has 20 native oak species. They are grand trees that may live to be quite old and very large, as revealed by a live oak in Texas that is over 12 feet in diameter! It is remarkable that a massive oak tree grows from a tiny acorn.



Bur Oak

The oak's stature, strength and beauty is acknowledged in this lovely poem:



Acorn

"The Brave Old Oak" by H. F. Chorley

**A song to the oak, the brave old oak,
Who hath ruled in the greenwood long;
Here's health and renown to his broad green crown,
And his fifty arms so strong.
There's fear in his frown when the Sun goes down,
And the fire in the West fades out;
And he showeth his might on a wild midnight,
When the storms through his branches shout.**

STOP 10. FILLING IN HOLES

When a large tree falls in the forest a big hole, or gap, is created in the canopy. The beech tree above the trail fell in 2010 and did just that. Almost immediately the woods changed. Lots of plants sprouted in the increased sunlight, and many different fungi began their decomposition. You may see turkey tails, parchments, puffballs and the like on the dead wood. Christmas ferns spread and pokeweed flourished. Over time mature trees will eventually fill the void. You have walked through a cut section of a fallen black locust tree and remembering its resistance to rot you can imagine walking this trail 10 (or 20) years from now and passing through this same opening.



Christmas Fern



Puffballs



Turkey tails



Barred Owl in Beech tree

Below the trail, as you walk to the next stop, are more examples of living beech trees, with the smoothest bark of any tree in the woods. Unfortunately people often carve on these smooth trunks, which can lead to heart rot. This fungus causes the trees to become hollow inside, plus fallen branches often leave open holes. (The big beech that fell was like this). Because of these features, beech trees are known as nature's motel, providing homes for many animals including bats, flying squirrels, raccoons, foxes and owls.



Beech tree

STOP 9.

A CONVENIENT THREESOME

On the right side of the trail three very distinct trees are growing close together, along with a woody vine. On the left is a sugar maple, in the middle black cherry, and on the right sassafras. Notice the obvious difference in the color of their bark, from light gray to black to orange. Remember that sugar maples have gray bark and make the helicopters. Cherry trees have very dark bark covered with thin flakes. The wood is hard, reddish in color and is used to make beautiful furniture. The small cherries ripen in the



Sassafras leaves and berries



Maple seeds

summer when you may see birds

fighting over them. Sassafras produces bluish-black berries on a bright red stalk, and they have the unique feature of displaying three different leaf shapes on the same tree.



Grape vines and fruit



Notice the large grape vine growing up the threesome which will also produce tasty fruits, giving the birds even more to fight about.

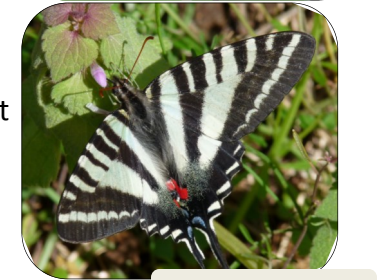
STOP 6.

PAWPAWS AND PEACE

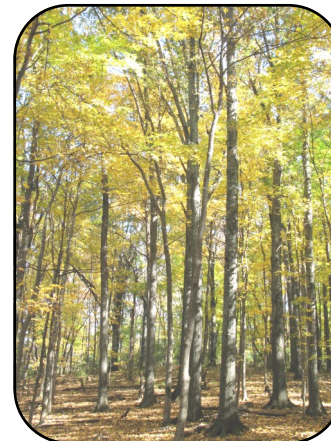
You don't have to go "way down yonder to the pawpaw patch" to see pawpaws, because there is a nice patch right here above the trail. They belong to a family of mostly tropical plants, and usually grow in colonies like this, all connected by underground roots. Their large leaves look tropical. The maroon colored flowers appear in spring and are pollinated by flies and beetles. The fruit ripens in late summer and tastes like a banana-papaya-mango mix. Their leaves are the only food source for the beautiful zebra swallowtail butterfly.



Pawpaw flowers, leaves and fruit



Zebra Swallowtail

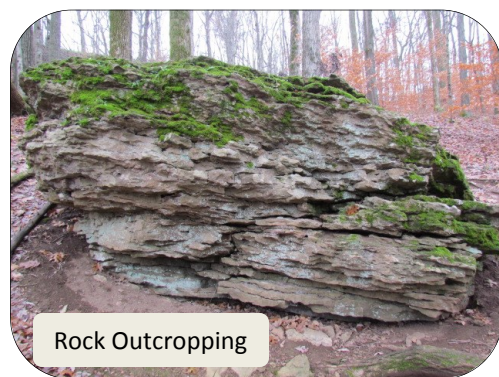


To make the most of your experience here, follow this short side trail ahead on the left to the resting bench nearby. Simply sit and be quiet for a moment and let the forest speak to you.

Try to relax and reflect on the importance of the natural world in your life, how fragile it really is, and the amazing benefits realized from a simple walk in the woods.

STOP 7. ON THE ROCKS

You may have noticed all the rock outcroppings visible from this trail. This one above you allows a close up view of a very special and fragile natural feature of this Park.



Erosion exposed this limestone rock many, many years ago. The bare rock eventually became a home for plants and then animals. Lichens, organisms containing fungus, and algae, and/or cyanobacteria, appeared first and are abundant decorating the rocks with beautiful colors. They grow so very slowly; about ¼ of an inch a year. Mosses appeared next which allowed soil to accumulate providing a substrate for larger plants such as ferns, and flowers like saxifrage and phacelia. Lizards, skinks, and snakes find refuge in the rocks. It takes a long time for this habitat to come about but only a moment to destroy it.



PLEASE DO NOT CLIMB ON
THE ROCKS.



STOP 8. HARD WORK AND PERSIMMONS

You have returned to The Old Roadway, where you can again enjoy the lovely stonework in the Parks. The rock work here and throughout the Parks was completed by the Works Progress Administration (WPA) from 1936-1941. This federal program created job opportunities for millions with much of the work taking place in parks and other public lands. The skill involved in this hard work is amazing and still evident in these beautiful walls, and other stonework throughout the Parks. Of course the rocks here offer the same habitat as the outcroppings on the hill above, so look for snakes, lizards and skinks among the lichens and moss. Notice both ebony spleenwort and woodsia ferns are here too.

On the lower side of the roadway is a group of persimmon trees. The bark is black and broken into small squares. Persimmons are delicious fruits and are only produced on female trees. These are all male trees. If you want to see fruit (in summer or fall), a short walk down the road and to the right at the fork will take you to female trees. Persimmons are a favorite fruit for possums, foxes, raccoons and people!

