The Old Forest Loop is a one-mile trail over mostly level terrain, guiding you through the southern section of the only old-growth urban forest in Tennessee. This land has never been farmed, and it provides us with a small snapshot of how our region used to look before it became a developed city.

1 WELCOME

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Overton Park's Old Forest was designated as a Tennessee State Natural Area in 2011. The forest has more than 350 species of flowering plants, over 100 kinds of resident or migratory birds, and a host of insects, reptiles, and fungi.

OLD-GROWTH TREES OF THE OLD FOREST

This shumard oak, 16 feet in circumference, is one of many old-growth trees that make The Old Forest the only urban forest of its kind in Tennessee. Other old-growth species in the forest include the tulip poplar, black oak, white oak, cherrybark oak, sycamore, sweet gum, and white ash.

BOTTOMLAND FOREST COMMUNITY

The Old Forest has three types of forest communities. This area, the bottomland hardwood type, includes water-loving trees such as the cottonwood and sycamore. As we ascend 34 feet to the highest area of the forest and pass through the other communities, notice the change in types of trees and plant life.

MIXED MESOPHYTIC FOREST

As we move up in elevation and away from Lick Creek, we enter our second forest community, the mixed mesophytic forest. A plant species is considered mesophytic if it is adapted to neither a particularly wet nor dry environment. Behind the trail marker is a large tulip poplar, Tennessee's state tree. It was chosen because pioneers used its wood to build houses and canoes.

THE PAWPAW

This area contains several pawpaw trees, a native plant with tiny maroon flowers that give way to enormous green fruits. The pawpaw is the only food source for caterpillars of the zebra swallowtail butterfly, which can be seen delicately gliding through the Old Forest in springtime. However, the flowers are not pollinated by butterflies; they smell rotten, which attracts beetles and flies. Those insects are not great pollinators, though, so a pawpaw often has few fruits compared to the number of flowers it produces in spring!

WILDFLOWER WATCH STATION

This spot is home to many varieties of wildflowers: cutleaf toothwort (one of the first flowers to bloom in spring), woodland phlox with its light lavender flowers, prairie trillium, may apple, and several species of violets. In early summer, wild hydrangea shrubs put forth delicate white flowers, and black snakeroot plants offer sprays of tiny yellow flowers. In the fall, look for white snakeroot and other varieties of daisy-like asters.

7 VARIETIES OF HICKORY

The Old Forest is home to four species of hickory tree: bitternut, shagbark, Texas, and mockernut. The wood of the hickory is known for its strength and durability, which is why General Andrew Jackson was given the nickname "Old Hickory" for his toughness in battle. Hickory nuts are a valuable food source for mammals, like the eastern gray squirrels prevalent in this forest.

8 OLIVER'S FOREST GARDEN

In the late 1970s, an unidentified man whose name may be Oliver brought seeds of the celandine or wood poppy from east of the Tennessee River to this area. In spring, almost a half-acre is now covered in yellow blooms. Several other unique plants in the Old Forest were seeded by Oliver from threatened wildflowers he rescued from area construction sites.

9 A FALLEN GIANT

This large cherrybark oak tree fell during a storm in 2014. Students from Rhodes College have been working with Overton Park Conservancy to take core samples from trees in the forest to determine their ages and learn more about the forest's history. Many of the tallest trees in the forest are around 180 years old, with another generation around 80 years old. As the older generation begins to fall, we're studying how to encourage the growth of similar tree species so that the Old Forest retains its character as a place full of beautiful, tall old trees.

PITS AND MOUNDS

One of the indicators of an old-growth forest are the pits and mounds you see on the forest floor. These features form when trees fall over due to storms, earthquakes, or old age. Pits are the holes left in the ground, and mounds are the earth originally held in the roots before the wood decays. Pits and mounds contribute to the plant diversity in the forest by changing the soil composition and creating micro-habitats.

CROSSROADS

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This intersection of paths is the only original segment still in use from the original 1902 plan for Overton Park. Architect George Kessler, who also planned Central Park in New York City, designed these wide trails as bridle paths, since horseback riding was preferred over hiking at the time.



12 THE ROLE OF VINES

The Old Forest has 43 species of vines, including eight different types of grapevines. Many canopy trees are adorned with grapevines that are as old as the trees themselves. The vines provide fruit, cover, and nesting structure for wildlife, while causing no harm to the trees.

PHANTOM CREEK

The central "creek" and drainage in the Old Forest is visible to your left where the ground is soft enough to form a creek bed. When there is enough rain, water will pool in the large area to your right before spilling over the higher, compacted trail into its natural course.

14 WHITE ASH

White ash trees are beautiful trees that have been cultivated widely in the United States thanks to their strong, dense wood. Ash is the wood of choice for everything from baseball bats to tool handles. Unfortunately, these trees are under massive threat from the introduction of the emerald ash borer beetle. This tiny green insect destroys all species of ash trees, potentially impacting 7.5 billion trees in the U.S. EAB has not yet been detected in Shelby County, but its impact in the northeast has already been devastating.

CANOPY GAPS

You're approaching a sunny area of the forest called a canopy gap. These gaps are created when large old trees fall and allow sunlight to reach the forest floor. This kickstarts the natural process of forest succession, when sun-loving plants are able to emerge from the soil after decades of being shaded out. The dominant species in this gap right now is jewelweed, a tall wildflower with bright orange blooms popular with ruby-throated hummingbirds. Gaps also create opportunities to view sun-loving insects like dragonflies and butterflies.

FIGHTING THE KUDZU

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This area has been the site of a great deal of kudzu removal over the past several summers. One of the most invasive plants to reach our area, kudzu is a vine native to Asia that comes from the pea family. It was brought to the United States as an ornamental but eventually was marketed to farmers as a means of erosion control. It is estimated by the U.S. Forest Service to spread at a rate of 2,500 acres per year, and it grows over the top of native plants, starving them of light and killing them. Because of its particular success in this part of the country, kudzu has been referred to as "the vine that ate the South." Multiple eradication efforts throughout the years have kept kudzu under relatively good control in the Old Forest, but careful attention must be paid to cut off new growth before it becomes established.

BOX ELDERS

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When the City of Memphis undertook a major kudzu removal project several decades ago, workers used chemicals to spray this entire area. It worked— the kudzu has been far more manageable since that time, but most of the other vegetation also died. You'll notice to the left of the trail that a single type of tree dominates this section. This is the box elder, which favors disturbed areas and high levels of light and often becomes one of the earliest plants to regrow after a disturbance. Its life span is relatively short (around 75 years), so this section of forest may look quite different in a few decades. This is the process of ecological succession, where a community perpetuates itself following disturbances like weather events, fire, or human impacts.

18 EAST PARKWAY PAVILION

At this point in the trail, if you kept walking straight, you'd exit the forest and find yourself at the East Parkway Pavilion and picnic area, a popular gathering spot. This section of the park is popular in the early-morning hours with bird-watchers, because the sun shines onto the trees and attracts birds foraging for food. More than 100 species of birds have been recorded in the forest. Some, like Northern cardinals and American robins, live here all year. Others, like roughly two dozen species of wood-warblers, only appear briefly in spring and fall as they stop over for a day or two on their migration route.

THE GNOME HOME

This tree is known as the Gnome Home because its hollow cavity would make an inviting hideaway for a tiny woodland creature. And indeed sometimes a faint odor of musk suggests that the red and gray foxes that have been spotted in the Old Forest occasionally spend time here. Older trees can hollow out inside because the pith—the cells at the center of the tree—is actually made up of dead material. It gives a tree structure and strength, but if the tree lives long enough those cells can decompose.

20 INVASIVE GROUNDCOVER

This area is dominated by periwinkle (*Vinca major*), an invasive groundcover plant. It sports large violet-blue flowers in the springtime, and its long running stems form dense mats on the forest floor. This plant, which is native to Europe and Asia, was introduced to North America as an ornamental in the 1700s and is still sold as a groundcover. While it grows well in home gardens, it has escaped into the forest, where it chokes out native plants.



A SHORTCUT 21

For a shortcut to the end of the Old Forest Loop, you can turn right here and end up back at Marker 11 (The Crossroads). The trail section that connects these areas contains several interesting features: a sunny canopy gap section, tangles of vines used by foraging birds, and a large patch of delicate purple Jacob's ladder flowers that blooms profusely in spring. On your right, just before you reach The Crossroads, is a tree that is wrapped tightly with dark green rattan vine that looks like a snake constricting its prey.

CAROLINA WRENS

Notice here how the composition of trees is changing. In the upland oak-hickory forest, shumard oaks have disappeared. Tulip poplars are getting smaller, and cherrybark oaks are starting to dominate. Stop and listen for bird songs. One of the loudest birds in the forest (but also one of the tiniest) is the Carolina wren, and they use this area for nesting. Their unique series of songs and slurs will become an unmistakable part of your Old Forest soundtrack as you get to know the trails.

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"ELVIS RELICS"

On your right is a unique example of historical litter. No one is sure where these urns originated, but a popular urban legend has it that they once sat on either side of the stage at the Shell, including during Elvis Presley's first paid performance. They were dumped in the forest in the 1970s.

FORKED TREES 24

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To the left of the trail is a large cherrybark oak shaped like a V. This tree has co-dominant stems or a "tree fork," which means that instead of the tree growing with one "leader" stem, two stems instead grew with the same diameter. These trees tend to fail more often than trees with a single leader, and in a more landscaped area (like along a sidewalk), action might be taken to either prune off one of the stems early in the tree's life or to reduce the amount of weight on one of the stems by trimming the crown of the tree.

THE LINKS AT OVERTON PARK

At this point you could exit the trail and come out near hole #3 at the Links at Overton Park. This golf course was the first public course in the region when it was established in 1906. It offers nine holes and is a popular destination for families, especially kids learning the sport. The Abe Goodman Golf Clubhouse is a great place to unwind, have a drink, and meet friends-and you don't even have to play a round to enjoy the ambiance!

SPICEBUSH 26

On your right is a cluster of spicebush plants. Their small, puffy, bright yellow blooms are one of the first signs of spring, and bright red berries appear in September. This native plant is excellent for our local wildlife: spicebush swallowtail butterflies lay eggs on the leaves, and robins, gray catbirds, and great crested flycatchers love to eat the berries.

LEAVES OF THREE 27)

We are now re-entering the mixed mesophytic forest. Many trees have the hairy, rope-like vines of poison ivy attached. Some vines in the Old Forest reach 5.5 inches in diameter, among the largest and oldest in the Mid-South. In addition to "leaves of three, let it be," the rhyme "hairy rope, don't be a dope" is a good way to remember which plants are not safe to touch!

BIRDS ON THE EDGE 28

To your left is another exit to the golf course. If you're walking on a sunny day and you're interested in birds, it's worth a short detour to see if there are birds feeding on the forest edge. In late winter to early spring, large flocks of cedar waxwings may be found feeding on berries in this area. Throughout spring, these edges are good places to see multiple species of vireos, as well as mockingbirds, blue jays, and ground-feeding birds like robins, cowbirds, and dark-eyed juncos.

DUTCH ELM DISEASE 29

Overton Park is home to two species of elm tree: American (Ulmus americana) and Slippery (Ulmus rubra). Once a common plant in American forests and landscapes, elms have declined by more than 75% since invasive beetles brought Dutch elm disease to the United States in 1928. The beetles transmit a fungus, and as the tree attempts to block its spread, it plugs its own tissue and eventually blocks nutrients from entering. This disease is another example of why wood should not be transported; the beetles were introduced when a shipment of logs from The Netherlands was brought to the country to be used in furniture production.

RIVER OATS

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This area features a large amount of river oats, a shade-tolerant grass often found on the banks of rivers and streams. It self-seeds abundantly and is often found in clumps, which allows it to stabilize banks. It likely entered the forest via birds eating seeds and depositing them away from its normal habitat.



31 WHITE-THROATED SPARROWS

Stop here and listen for bird songs. From late fall into early spring, one of the most common sounds of the forest is the whistle of the white-throated sparrow, which sounds roughly like "oh-sweet-Canada" and lasts around four seconds. These birds are easy to spot, with their white throats, black eye-stripes, white crowns, and small yellow patches between their eyes and beaks. Like robins, they can often be seen on the ground, scratching through leaf litter looking for food.

57 FUNGI AND ROOT BALLS

If you turn around, you'll see a large downed tree and its root ball. Dead trees like this one provide ideal conditions for fungus to grow. Like animals, but unlike plants, fungi get their energy from digesting organic material. While many fungi have a mutually beneficial relationship with living trees, they also play a huge role in keeping forests from becoming stacks of dead branches, leaves, and other matter. Fungi that deed on dead material are called saprophytes, and they recycle this material by returning nutrients to the soil, where it can then be used by the next generation of plants. Animals cannot digest wood because of its toughness, so fungi are crucial in breaking it down and restarting the process of growth.

OAKS OR MAPLES?

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Our forest, which has been characterized by mature oaks and hickories for the last few hundred years, is experiencing a low level of oak/hickory regeneration. In some places, canopy gaps are filling with undesirable invasive plants and trees; in others, such as this area, they are filling with maples. Maples are more shade-tolerant than oaks, which need a certain amount of understory light to establish deep roots. This type of conversion from an oak-dominated forest to a maple-dominated forest is not a bad thing in and of itself, but over time it will dramatically alter the appearance and experience of the forest. Overton Park Conservancy and Rhodes College are conducting research to determine whether there is a way to help oak saplings achieve maturity here in the Old Forest to preserve some of this historical character.

SOCIAL TRAILS AND FOREST DESTRUCTION

This area of the forest in particular is criss-crossed with "social" trails that have sprung up over the decades, created by people who wanted to walk a different path. Volunteer trails like these are harmful to forest health because plants and wildlife need wide stretches of untrampled soil to thrive. Over the next few years, we'll be working with the Tennessee Department of Environment and Conservation to determine how to close some of these unnecessary trails and return them to the forest.

END OF THE LOOP

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You're almost finished! At this point, you'll turn left and retrace your steps past trail markers 3, 2, and 1 to exit near the dog park. We hope you've enjoyed this walk through our historic forest. If you'd like a catalog of the plants and animals of the forest, visit *www.inaturalist.org* and search for "Overton Park" in the Places section.

ACKNOWLEDGMENT

This interpretive content owes a great deal to the late Don Richardson, a tireless advocate for conservation in Memphis and beyond. Several sections are adapted from his 2000 map of the Old Forest.

GO INTERACTIVE

This content can also be accessed online, with photos and GPS accuracy. Visit *www.overtonpark.org/trails*.

