The Tennessee Conservationist

Take a Hike at Meeman_Shelby Forest State Park

by Naomi Van Tol

The bleak woods of winter have blossomed into a lush green jungle, and it's time to hit the trails at Meeman-Shelby Forest State Park in search of botanical wonders.

The 13,500-acre park in Millington hosts a rich variety of delicate wildflowers, leafy shrubs and majestic trees. If you have not explored the park's 20-mile trail system – or even if you have – now is a perfect time to hike the three-mile Woodland Trail loop. Be sure to bring plenty of water and a snack, as this hilly trail is a challenging hike.

Your journey begins at a trailhead atop a bluff overlooking the deep and narrow valley of Riddick Creek. As you enter the forest, your dazzled eyes may see nothing more than an overwhelming blur of green. Take a moment to look around. Soon you will pick out a few of the many species that help to make this park the most biologically diverse forest in west Tennessee. Meeman-Shelby Forest is home to 11 State Champion trees, including a 154-foot American Beech and a 152-foot Nuttall Oak. The park also boasts three National Champion trees: a 34-foot May Hawthorn, a 122-foot American Elm, and a 127-foot Cedar Elm.

The trees that grow on the Third Chickasaw Bluff are mostly Tulip Poplar, Sugar Maple, American Elm, Bitternut Hickory, White Ash, Sweetgum, dogwood, Persimmon and a variety of oaks. You will notice many hollow living trees and many standing dead trees, or "snags," which is typical of mature forests. Hollow trees provide safe nesting spots for

the animals of Meeman-Shelby Forest, and insect-riddled snags are a vital food source for woodpeckers. When dead trees fall to the ground, as many did in last summer's storms, they are rotted and consumed by the fungi, insects and bacteria that do the most important work in this forest: making new soil.

You will also notice vines of many types looping through the forest canopy at Meeman-Shelby Forest. The most notable of these are the wild grapes, often called Muscadines, that arc from tree to tree. These vines are thickest at their roots and taper upward into slim tendrils that clasp the highest branches of the forest canopy, spreading their broad leaves where sunshine is the most plentiful. Their tasty fruits ripen in late summer but grow far beyond the reach of hikers and are quickly devoured by birds, raccoons and other grape-loving creatures.

Another ubiquitous vine is Poison Ivy, which you can easily distinguish from grape vines by its coating of "hair," or tiny fuzzy roots that help the plant cling tightly to a tree's bark. In contrast, grape vines hang freely from upper branches and are not attached directly to a tree trunk. Most hikers soon learn to spot the silhouette of Poison Ivy's three jagged leaflets on the ground, but many don't think to watch for its leaves at face level. All parts of the Poison Ivy plant contain an oily substance called urushiol that can cause an itchy rash when it touches bare skin. If you know you have touched Poison Ivy, a thorough soapy scrub within a few hours of exposure can prevent the rash.

The other local bane of barelegged hikers is Stinging Nettle. This leafy herb thrives along the sunlit edges of hiking trails and can grow to knee-height. Tiny tubular hairs cover the plant's stem and the undersides of its large oval leaves. These hairs contain an acid that causes a painful burning rash, but in most people the effect will subside within 10 minutes.

Poison Ivy and Stinging Nettle often grow near their natural antidote, the Jewelweed, which is also known as Spotted Touch-Me-Not. This succulent plant has small oval leaves, tiny orange flowers shaped like trumpets, and seed pods that explode at a touch when they are ripe. Juice from the leaf and stem of a Jewelweed will soothe the pain of a nettle sting and reduce the itch of Poison Ivy.

As the Woodland Trail descends into the creek valley, you will notice giant silver-skinned beeches whose roots cling tightly to the steep bluff. Beech trees are often accompanied by parasitic beech drops, which are tiny tubular plants that lack chlorophyll and must steal their nourishment from a beech tree's roots. Many of the beeches near hiking trails are badly scarred by carved initials. This human desire to deface the tree's smooth bark has a long history: the Old English roots for the words "beech" and "book" are identical, as beech bark was used for paper in ancient times. Please resist the atavistic urge to leave your own mark, and remember that trees can die from infected wounds.

Once you reach the creek valley, you will notice that this bottomland habitat hosts a

different group of species. The small trees and shrubs that make up the forest's understory are mostly Red Maple, Silver Maple, hornbeam (also known as musclewood because its twisted trunk resembles a flexed muscle), Hop Hornbeam, Pawpaw and Red Buckeye. Sassafras is fairly common and can be recognized by its reddish corrugated bark and large grooved leaves. Larger trees along the creek include Cottonwood, Sycamore, Water Oak and Hackberry. At your feet, you may see dense colonies of Mayapples that popped out of the ground in early spring to unfurl their fat leafy umbrellas. Now the Mayapple's waxy spring flower is swelling into yellow summer fruit.

Other members of the herb layer include Prairie Trillium, Wild Ginger, Virginia Bluebells, Jack-in-the-Pulpit, Green Dragon and many fern species.

The three broad leaves of Prairie Trillium are marked by a mottled pattern of lighter and darker green. Despite its misleading common name, the Prairie Trillium is only found in rich woods. While many trillium species are graced with showy blooms, the Prairie Trillium's flower is small with spiky maroon petals and drooping green sepals. A unique form of Prairie Trillium, known as esepalum because it lacks sepals, was discovered at Meeman-Shelby Forest in the late 1980s.

Wild Ginger has fleshy heart-shaped leaves that grow close to the ground. Its three-pronged maroon flower hides under the leaves, providing easy access for the beetles and slugs that pollinate the plant. The root of Wild Ginger is fragrant but not as flavorful as the Asian ginger root we use for cooking.

Unlike trillium and Wild Ginger, the Virginia Bluebell is an ephemeral plant that blooms for a brief month in the spring before it vanishes. This richly hued wildflower grows in thick patches in the floodplain of Riddick Creek, but is largely absent from the rest of Meeman-Shelby Forest.

Jack-in-the-Pulpit and Green Dragon are common along the Woodland Trail, and are closely related to each other. Jack-in-the-Pulpit has three broad pointed leaflets that flare above a single or double stalk. Take a peek beneath the leaves to find the inflorescence, or flowering portion of the plant, which is the cause of its whimsical name. You will see a green and purple striped spathe – a circular sheath that's actually a modified leaf – whose opening is topped by a drooping canopy, beneath which is the plant's spadix, or flower spike. This unusual inflorescence looks like a preacher sitting in a high cathedral pulpit. Jack-in-the-Pulpit is also called pepper turnip, because the plant's corm, or root, is shaped like a turnip and contains calcium oxalate crystals that will burn your mouth and throat if eaten raw.

Green Dragon usually grows as a single tall stalk topped with a flared semicircle of five to 15 narrow pointed leaflets. It has a simpler, solid green version of its cousin's fancy "pulpit" but boasts a long slender spadix that rises to a point several inches above its spathe. In the autumn, the female flower of both Green Dragon and Jack-in-the-Pulpit

will produce a single large cluster of red poisonous berries.

The moist slopes and bottomlands of the Woodland Trail also provide prime habitat for a variety of ferns. Christmas Fern is by far the most common species you will see. It's the only fern in our area that stays green all winter, and this quality made it a popular choice for holiday greenery – hence the name. Ebony Spleenwort looks like a tiny delicate version of the Christmas Fern, but with a dark glossy stem.

A similarly fragile plant is the Maidenhair Fern, whose wiry fronds grow in a distinctive circular pattern. The Broad Beech Fern often grows near beech trees, and can be recognized by the two leaflets closest to its stem, which point backward like wings.

Cinnamon Fern is the largest of the ferns at Meeman-Shelby Forest, growing in waist-high clumps. This fern's reproductive spores are clustered on shriveled cinnamon-colored fronds that give the plant its name.

As you huff and puff your way through the steep ravines on the south leg of the Woodland Trail, don't forget to pay attention to the changes in the plant species around you. You will notice the dense thickets of Horsetail that grow along many creeks in Meeman-Shelby Forest. Horsetail is a "living fossil" whose family originated 300 million years ago. Horsetail spreads in dense clusters from its rhizomes, but also reproduces by wind-borne spores like its closest relatives, the ferns. This ancient plant is also known as Scouring Rush because its hollow jointed stems contain silica, an abrasive substance that can be used to scrub pots and polish wood or metal.

The most common member of the shrub layer at Meeman-Shelby Forest is Spicebush, whose yellow-green spring buds have recently given way to summer leaves. Spicebush is a large branching bush, usually with multiple stems, whose leaves and twigs emit a fragrant lemony odor when crushed. Spicebush flowers are an important food source for the Spicebush Swallowtail Butterfly, and in the autumn its peppery red berries are eaten by many bird species.

A less common shrub is the Strawberry Bush, whose small pink fruit has a prickly husk that resembles a strawberry. This unusual fruit also gives the shrub its other common name, Hearts-a-Bursting, as the "strawberry" husk bursts open in autumn to reveal four chambers that each contain a red berry. You may also spot clumps of Wild Hydrangea, whose flowers bloom in creamy white clusters that will last for most of the summer.

Before you return to the trailhead, stop for a few minutes to soak up the moist oxygen-rich air created by a million plants breathing in unison. All of the trees, shrubs and herbs around you are busy leafing, fruiting and reaching for the sun. You can almost hear the water surge upward to the rustling green canopy.

Your body may be tired and sweaty and mosquito-bitten, but your spirit will be refreshed. The beautiful bluff and swamp habitat of Meeman-Shelby Forest State Park

is not just a sanctuary for plants – it is also a sanctuary for you and me, and for many generations yet to come. Take a deep breath of that air.

For more information on Meeman-Shelby Forest State Park, call the park office at 901-876-5201.

(Naomi Van Tol is a freelance writer/designer and unapologetic treehugger who lives in Memphis. She worked at Meeman-Shelby Forest State Park in 2002-2003 as a seasonal interpretive ranger.)

Sidebar:

Leave the Wild Things Alone

As you marvel at the floral glories of Meeman-Shelby Forest State Park, don't give in to the impulse to pick wildflowers or dig plants from their natural habitat.

Some of these species are rare or threatened in the wild, and all of them are protected by park regulations. Think of the park's hiking trails as a vast showroom in which you may identify the plants you want to buy for your own garden. Many of the wildflowers, shrubs and trees that grow at the park can be cheaply purchased at local nurseries or native plant sales.

For more details on gardening with native plants in Tennessee, you can download a free brochure from the Southeast Exotic Pest Plant Council at: http://www.se-eppc.org/states/TN/landscape.html.

Other Web sites of interest may include: The Champion Trees of Tennessee at: http://www.state.tn.us/ agriculture/forestry/champions/.

The National Register of Big Trees at: http://www.americanforests.org/ resources/bigtrees/.

The Web site for Tennessee State Parks can be found at: http://www. tnstateparks.com.