## Self-Guided **Nature Trail**

Loop trail distance:

¼ mile

Round-trip

walking time:

30 minutes

## **Fragmented Woodlands** ■ Stop at Stage Road sign near Buffalo Rd.

As you begin your walk down the ancient animal trace to the spring house and still house, try to picture the Tipton-Haynes woods from an aerial viewpoint - it would appear as an isolated fragment within a diverse landscape of agricultural, industrial, commercial, and residential development. Plant and animal communities are affected by the reduction of habitat, and wildlife corridors are interrupted. Streamflow and water quality of Catbird Creek may also be impacted by upstream land uses. Even the

enjoyment of a walk in the woods may be reduced because of the visual and noise intrusions from nearby highways and buildings. Tipton-Haynes is committed to maintaining these fragmented woodlands, open spaces, streams, and other natural areas as well as our historic landscape.

> Birds and **Animals**

> > Before exploring the cave, stop and reflect,

and listen for the sounds of birds, or rustling sounds in the leaves or branches, indicating the presence of small animals. Although the wooded area is small, providing 4 ½ acres of animal habitat, many common animals have been observed here, including deer, skunk, raccoon, fox, woodchuck, opossum, squirrel, and chipmunk. An occasional bear may wander down from Buffalo Mountain when food supplies are scarce.

Common birds found in the woods and along woodland edges include Northern Mockingbird, Downy Woodpecker, Northern Cardinal, Mourning Dove, and American Robin. The Great

Horned Owl, Turkey Vulture and Red-tailed Hawk have also been observed. The Eastern Bluebird may be observed in cleared areas, such as gardens and fields.

**Springs and Streams** Stop at Spring House Next to Pond If you look inside the spring house, water may be seen bubbling up through the sediment. Springs are formed when ground water flowing near the surface under natural pressure emerges from the rocks and soil. This "bold" or ever flowing spring rarely dries up-only during drought conditions when the ground water table is lowered.

An animal trail followed by the prehistoric American Indians led to this spring while hunting animals stopping at the spring to drink. Later, this trail became the Old Stage Road connecting Jonesborough and

> Morganton, NC. The site's cave and spring also attracted the Dirst white men to explore this area, James Needham and Gabriel Arthur (1673), and perhaps Daniel Boone (1760s). The Tipton and Haynes families used the spring house to keep food fresh. Butter and milk were placed in crocks in the cold water. Near the spring house is the

still house, which was used in making corn whiskey and other spirits. Colonel Tipton chose this location because of its proximity to the spring, which provided a good source of fresh water needed for the distillation process.

Stand on the bridge and observe whether Catbird Creek is flowing. Classified as an intermittent stream, it is likely to be flowing during wet periods when there is sufficient upstream runoff, but is reduced to a trickle or simply dries up during periods without significant precipitation. Catbird Creek originates high on Buffalo Mountain and is a tributary stream within the Watauga River Watershed. Moistureloving plants grow along some of its banks (riparian zone), providing important wildlife habitat, and the stream can support aquatic life such as crayfish.

Do you notice the sights and sounds of nature when you walk through the woods? Those of us who no longer live or spend significant time in our natural surroundings have lost some of our ability to read the landscape. The short trail and leaflet are designed to help sharpen your awareness.

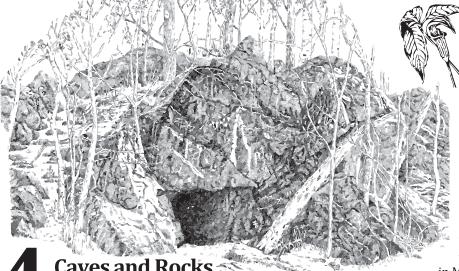
For more Information about **Tipton-Haynes State Historic Site** please visit

## **Tipton-Haynes.org**

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Caves and Rocks
Use your flashlight
Enter the cave and explore the

large "room". The cave is a solution cave, formed in limestone, which is a sedimentary rock composed of the mineral calcite (calcium carbonate). The likely source of the calcite is from the shells of marine organisms deposited in an ancient shallow sea. These deposits built up into layers of sediment which hardened over time to form limestone rock. Caves are formed when mildly acidic ground water moves through cracks and fractures in the rock, dissolving away some of the limestone. Over time, the cracks become enlarged into passages and rooms.

Observe the interesting cave deposits of calcium carbonate, which are produced through slow precipitation from ground water seepage. The coloration seen in these deposits is the result of impurities in the water. Dissolved iron produces most of the brown staining, while manganese produces the dark blue, gray and black colors. A landscape containing caves, sinkholes, and other solution features is called Karst topography. Although the cave is small, it still provides habitat for bats and insects. A Dire Wolf tooth was discovered in the 1970s inside the cave, documenting the presence of a large carnivorous mammal which lived during the Pleistocene (ice age) Epoch, becoming extinct about 10,000 years ago. The chimneys and foundations of the Tipton-Havnes house are constructed of limestone. After you explore the cave, exit through the same entrance and go to the right.

Wildflowers stop at lean-to

André Michaux was a French botanist who journeved through the eastern United States for 11 years identifying and documenting various plants. His travels included a visit to the woods at Tipton-Haynes in the spring of 1795 and 1796. Two examples of interesting plants include the lovely blooms of the Trout Lily, which carpet the woods in March and April, and the Alum Root, which colonizes on rock surfaces and can be observed in the limestone above the main cave entrance.

> Nonnative | Invasive Plants

self-discovery along trail

Nonnative invasive plants include plants, vines, shrubs, and trees that are not native to this area and are destructive to the environment. Many of the invasive plants were brought to the United States as ornamentals by European settlers in the 1700s and 1800s. With no natural enemies to keep them check, these alien plants spread and destroy the native plant communities. Ongoing weed-removal efforts reduce their impacts on the environment and help achieve plant and animal diversity.

Further along the trail, look for the two upper cave entrances on your right. The first entrance connects into the large room of the cave you earlier explored. From the upper cave openings, the trail will soon descend down through the rocks.

The Woods self-discovery along trail

Beyond the lean-to, the trail enters the woods and will ascend through the rocks up a series of steps. Walking through Tipton-Haynes woods, you will see not only a number of large trees (between 2' and 3' in diameter), but also a surprising variety of species. Use your tree guide to identify a variety of trees. Although the woods cover only about  $4\frac{1}{2}$ acres, the variability of its terrain and environmental conditions (microenvironments) results in the existence of dissimilar places, or habitats. First you will walk up a moist north-facing slope, ideally suited to the shade-tolerant Sugar Maple. The top of the hill is relatively dry and supports the Bitternut Hickory, Oak, and Red Cedar. After descending the hill, observe the relatively wet, flat habitat occupied by the Willow and Sycamore. The Sugar Maple is the most abundant and productive tree in the woods, including many sapling-size. The large, prominent trees in the woods include the Sugar Maple, Oak, White Ash, Black Walnut, Tulip Tree, and Sycamore.

For the early settlers, the abundance of trees provided an ample supply of wood for construction uses, and cooking and heating. Sugar maples were tapped in the spring for making syrup and other sweeteners. Recent dendrochronology (tree-ring dating) research has determined that white oak was used in constructing Colonel Tipton's cabin while the corncrib and barn were built during the Haynes time period from the Tulip Tree (also called Yellow Poplar)

## **8** Ghost of the Forest

At the bottom of the steps, look off the trail

for the large Sycamore tree (labeled no. 12) growing in the flat near Catbird Creek. Called the Ghost of the Forest or Ghost Tree by the early Native Americans, the Sycamore has distinctive white and mottled bark and long branches which give it a skeletal, ghostly appearance, especially in the winter moonlight.