blished cemetery. Personally, I'd really rather not have to excavate human remains – it is not just the regulations, policy or laws involved or even having to move them from their 'not-so-final' resting place to another, but the time it takes to excavate and properly document every artifact (and sometimes soil sampling) associated with the remains easily encompasses three days in the field – and more in the office. Luckily, I have not been involved in the excavation of any human remains for about 20 years.]

Visit us at
WWW.ALABAMAARCHAEOLOGY.ORG

The following is reprinted with permission of the author from the recent "Friends of Horseshoe Bend" newsletter:

A Living Witness to the Battle?

By Eric Frey,
Park Ranger, Horseshoe Bend
National Military Park

Although the Battle of Horseshoe Bend occurred 205 years ago, the park may have recently discovered a witness to the battle that still lives today. Due east of what we refer to today as Gun Hill, where Andrew Jackson positioned his artillery unit, an American beech (Fagus grandifolia) tree is situated on a slope between the battlefield and the Tallapoosa River. The tree is tall but blends in with the surrounding high canopy. Its trunk is thick and shows scars of previous visitors who felt the need to leave their initials in its smooth bark. Its roots are sinewy, starting five or six feet above the ground and then spreading out over the surface like octopus tentacles, eventually burying themselves in the soil & anchoring the tree. At first glance, it has all the characteristics of a typical old tree; but if you take an extra moment, you may start to sense that it wants to share a fascinating story.

"That Big Beech Tree" Last summer a visitor asked if I knew about "that big beech tree along the nature trail". Embarrassingly, I had to show my ignorance, but the comment intrigued me. A week later, I went in search of the tree, and found it less than half a mile from the Battlefield Overlook and less than thirty feet from the trail's edge. I had passed it many times without a second thought, but now stood amazed that something so large and impressive could be so inconspicuous.

A few months later, another individual came into the Visitor Center and approached the front desk. "Are there any witness trees in the park?" he asked. The term "witness tree" typically refers to a tree that was alive and present at an event of historical importance; a witness to the events that unfolded. "We don't know for certain of any trees that were alive in 1814, but there is a really big beech tree along the trail," was the best answer I could give. After our conversation ended, my search for answers began.

Compiling Evidence Much of the battlefield and land surrounding it quickly became deforested agricultural fields after the forced removal of the Creek Indians in the 1830s. This would limit the areas that could possibly have a 200 year old tree. I remembered seeing an aerial photo of Horseshoe Bend dating to 1929 in the park's museum collection. If the aerial photo showed forested area where the beech tree stands, it would provide at least some circumstantial evidence of the tree surviving this time period. The photo in fact shows much of the Bend was farm land, but where the beech tree stands is forested. The search for more evidence continued.

Location of the beech tree (X) on a 1929 aerial photo. (Google Earth Pro, NPS Photo)

Witness trees are most often identified by primary sources; a photograph of the aftermath at Gettysburg, a diary or letter that mentions the landscaping around a home, or a bullet found lodged in a trunk. Since photography was not around at the time of the Battle of Horseshoe Bend, and with the tree's location being on the very periphery of the battlefield, primary source materials would prove fruitless with our beech tree.

Another way to determine whether a tree witnessed a significant event is the science of dendrochronology or tree-ring dating. These methods can precisely date the age of a tree; however, it requires boring into the trunk which may increase the chance of disease and infection. With the National Park Service's guiding principles of preserving and protecting both natural and cultural resources, this option was also not a viable option.

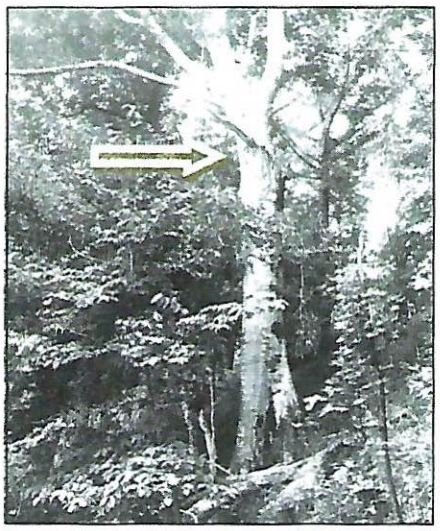
I then reached out to a number of people that could possibly provide some alternative ideas. Paul Dolinsky, Chief of the National Park Service's Historic American Landscape Survey, began the cleverly named "Witness Tree Protection Program" in 2006 to

help identify, document, and preserve historically and biologically significant trees within the Washington, D.C. park sites. During our brief phone call he emphasized the NPS principle of not using any "invasive" methods such as boring; however, he did recommend some measurements of the tree and looking into research on beech growth rates. This would possibly give us a very general idea of the tree's age. We took his advice and measured the trunk's DBH, or diameter at breast height, to be approximately 46 inches.

One growth rate found in our research stated that to determine a beech tree's age, multiply the DBH by 6 -- which would put the tree around 276 years old. Given Alabama's warmer climate and longer growing season, we considered this a high estimate, but an estimate nonetheless. Since all the anecdotal evidence indicated that we could in fact have a witness tree, I contacted

Ranger Matt Robinson getting an approximate measurement for the tree's diameter at breast height (DBH). (NPS Photo)

Dr. Matthew Therrell & the University of Alabama's Dendrochronology Research Lab for any additional ideas and also sent him a photo of the tree. In the photo, he noticed a large secondary branch that had recently broken off. "If you could send me a slice of that limb, we could establish a minimum age for the tree and also extrapolate somewhat from that."



The photo of the tree sent to Dr. Therrell Notice the broken limb at its base. The arrow indicates the limb's original location on the tree. (NPS Photo)

A phone call to Brian Robinson, the park's sawyer extraordinaire, and one hour later, we had a slice of the limb ready to be sent to the lab. A few days later, I received an email from Dr. Therrell stating the following:

That limb you sent me has 122 rings [indicating approximately 122 years old] from near pith to the bark on an average radius of about 15cm. Given the height in the tree at which the limb was growing and the overall size of the tree I don't think it's any kind of stretch to estimate that tree is more than 200 years old.... Without any additional evidence my professional estimate is that it's likely to be 250-300 years old but it certainly could be a good bit older & I really think the minimum age has to be close to 200.

Silent Sentinel As a 'Magic 8 Ball' might predict, "All Signs Point to Yes" that the beech tree was rooted on the slope just as the Red Stick Creeks and Andrew Jackson's allied forces fought above on the flat ground in 1814. Secrets have been kept for centuries and many will continue to be held by this mute sentinel; but now that the park is aware of its existence, we will continue to search for more answers.

The human history of Horseshoe Bend National Military Park has always been in the forefront of visitor's minds and at the center of the park's interpretive focus, but we continue to discover that the natural and cultural stories are integrated and always have been. It's amazing to think that the Creek Indians who lived in the area may have used the leaves from this same beech tree for medicinal purposes, or passenger pigeons that were hunted to extinction may have once roosted in its crown.

Although a large limb lays at its base, the tree has survived disease, tornadoes and drought. Although it bears the scars of inconsiderate hands marking initials into its side, the hands of man have spared it from the saw blade. Its resilience is not unlike the Creek Indians that were defeated in battle, forced to leave this land, and yet continue to thrive .... The beech tree shows its age but continues to be a silent sentinel, standing watch along the banks of the river. During your next visit to the park, consider walking the nature trail and seeing for yourself this living witness to so much history. As you stand looking up, don't expect it to openly share its exact age or all of its stories; sometimes the silence can be a story of its own.

www.alabamaarchaeology.org
AND
Check out our FACEBOOK page