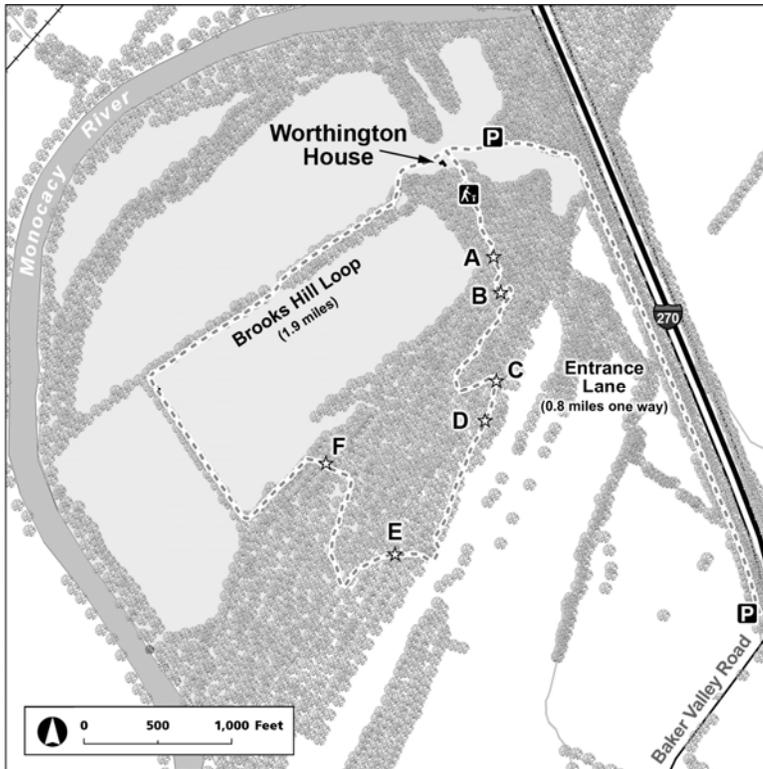




## Worthington Farm Brooks Hill Loop Trail – The Natural Landscape



### Introduction

Welcome to Monocacy National Battlefield and the Brooks Hill Loop Trail. This brochure provides you with a self-guided tour of the natural landscape along the 1.9-mile Brooks Hill Loop trail. The trail encompasses a section of the battlefield where Confederate forces crossed the Monocacy River onto the Worthington Farm and prepared to attack the Union troops. It also highlights many significant natural resources, and from a vantage point on top of Brooks Hill, you can see much of the battlefield.

John T. Worthington purchased this 300 acre farm in 1862. He grew primarily corn and wheat, and also had pastureland and fruit trees. The six-room house, representative of a prosperous farmer's residence of the time, was built in 1851.

You may also wish to enjoy the 1.6-mile Ford Loop Trail. Information on this loop is located in the "Battlefield Trails" booklet at the Visitor Center and includes details on the Confederates' preparations for battle and attacks from the Worthington Farm against Union forces.

Please use the map at left to orient yourself to the landscape at each stop.

**Caution:** *The Brooks Hill Loop trail has a short steep climb up the hill; please use caution when walking this section. Also, as some fields on this farm are under agricultural lease, please be aware that some of the fences are electrified to keep in the cattle.*



### Stop A



### Changing Landscapes

The area around this stop is an excellent example of how landscapes change over time. What was once farmland is now forest. If you look around closely, there are clues to the past uses of the area. The trees in this line were planted along a six rail fence, by evidence of the existing post. The landowner grew these Osage-orange (*Maclura pomifera*) trees and used their long, sharp thorns as a "living fence". When trimmed regularly, they become a nearly impenetrable hedge that would contain livestock. Most of the old fence lines around the Worthington Farm are made up of Osage-orange, but their appearance and usefulness have diminished due to lack of maintenance.

### Stop B

#### Witness Trees

Throughout the park there are a number of trees which are referred to as "Witness trees", or ones that were present at the time of the battle. In the summer of 2003, natural resources staff conducted an inventory of all the park's witness trees to document the species, height, diameter, condition and location of each. Follow up visits are made periodically to monitor their health. Of the more than 75 possible trees, numbers 39, 40, and 41 are visible from this stop.

An invasive, exotic plant is a one that can spread rapidly through an area because it is not native to the area. The invasive, exotic plants garlic mustard (*Allaria petiolata*) and Japanese stilt-grass (*Microstegium vimineum*) flourish on the forest floor because they don't require much sunlight and are not eaten by deer or other wildlife. They usually will dominate an area and not allow other plants to exist. During the growing season, these species are visible as the prominent plants on the forest floor. They also threaten native plants by spreading their seeds and displacing native species that can't compete with them.



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## Stop C

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### Forest Succession

At the top of the hill the fallen tree and resulting canopy gap are good examples of forest succession. When the tree fell it opened up the forest floor to sunlight, making it possible for new plants to grow. Invasive plants may become established in the gap because they grow faster than native plants. Smaller trees that had already become established also grew higher because of the increased sunlight. Forest succession is important because it encourages new growth and different plants to become established in that area.



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## Stop D

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### Upland Forest

The area around this stop is a good example of an upland forest. The trees of the Oak-Hickory forest type are abundant at this location. The primary trees are white, red, black, and chestnut oaks with some bitternut and pignut hickories. The nuts produced from these trees are an excellent source of food for the squirrels, chipmunks, and other wildlife which live in this area.

Also, white-tailed deer (*Odocoileus virginianus*) are abundant in this area. They eat most everything in the understory up to a height of about 5 feet. The forest understory includes low branches, leaves, plants, and small saplings. Too many deer can inhibit new growth of the forest and eventually lead to its decline.

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## Stop E

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### Human Impacts

At this stop there are excellent examples of how humans leave a mark on the environment. The path you just went down is an old logging road that was used in the middle of the 20<sup>th</sup> Century. Also, in the stump next to the signpost is barbed wire, a post-Civil War invention. The tree grew around this wire and the wire has been imbedded in it since. Because the wire is made of metal, and takes many years to rust away, one can see that the things people leave behind tend to take a long time to decompose or fade away. For this reason, it is important to limit the amount of things you leave in the environment.

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## Stop F

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### Lowlands

The forest type at this stop, a bottomland hardwood forest, is different from that at the top of the hill. The change in elevation and soil type makes it possible for different plant species to grow. Also, the amount of moisture in the soil is higher in the lowland areas. Some trees present in this moist soil are Silver Maple, Sycamore, Box Elder, and Willow trees. The stream that flows through this area is home to frogs, crayfish, salamanders, minnows, and sometimes ducks. The stream also provides other species with a source of water to drink.



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Monocacy National Battlefield is administered by the National Park Service, U.S. Department of the Interior. For additional information, please write or call:

Monocacy National Battlefield  
4801 Urbana Pike  
Frederick, Maryland 21704  
(301) 662-3515  
<http://www.nps.gov/mono/>

In the event of an after-hours emergency, please call **911** or dispatch at **301-714-2235**.

***Please remember that this is a National Park and it is illegal to remove any artifacts or natural resources. Future generations would like to experience the park just as you are now. Preserving the landscape will assist that endeavor.***

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