



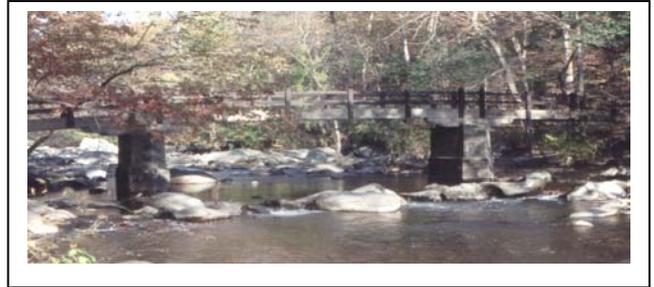
National  
Capital  
Charter

# Annual Fall Tour

*Natural & Cultural Resource Protection & Restoration*  
**October 9, 2008**

## **ROCK CREEK PARK NATIONAL PARK SERVICE**

<http://www.nps.gov/rocr/>



- AND -



**THE UNITED STATES  
NATIONAL ARBORETUM**



[www.usna.usda.gov](http://www.usna.usda.gov)

**When:** Thursday, October 9, 2008 (8:30 am to 3:00 p.m.)

**Transportation: (two options)**

**We Drive: (8:30am)**

**Meet at the USDA South Building on C Street, between Wings 2 & 3**

**You Drive: (9:00am)**

**Meet at Rock Creek Park Nature Center, (9:00)**

**\$15 SWCS members / \$20 non-members / FREE to new Society members**  
***(Box Lunch included)***

**Contact: Janae Hammett: 202-720-1870 or Bill Boyer: 202-720-0703**

**Reservation Deadline: Thursday, October 2, 2008**

**Make checks payable to "SWCS-NCC" and send to Janae Hammett, NRCS, 1400 Independence Ave., SW. Rm. 6819-S Washington, DC 20250**

## Agenda

- 8:30 a.m. Leave USDA South Building
- 9:00 Arrive at Rock Creek Park-National Park Service
- 9:05 Introductions and Tour of Nature Center  
Our guide is Maggie Zadorozny, Director of Education
- 9:45 Tour Historic Millhouse Ford Crossing
- 10:15 Tour Historic Peirce Mill Dam “Fish way”
- 10:45 Tour Historic Peirce Mill
- 11:30 Lunch at Peirce Mill Pavilion and Picnic area
- Noon Arrive National Arboretum
- 1:00 Tour National Arboretum on Tram (one hour)  
Our guide is Scott Aker, Garden Unit leader, who will discuss:
- Surface and ground water issues;
  - Erosion or land subsidence issues;
  - Work/research with plants to: control erosion, improve water quality, and address plant health,
  - Issues with invasive species;
  - Wildlife and habitat issues.
- 2:30 End Tour/Visit – Return to USDA South Building
- 3:00 Arrive at USDA South Building

## **The National Capital Chapter of Soil and Water Conservation Society and the Department of Interior, Rock Creek National Park is collaborating to sponsor the 2008 Fall Tour.**

Rock Creek Park was founded in 1890 as one of the first federal parks. Its establishing legislation cites the area's natural beauty and high public value. When the park was established, it was on the edge of the growing city and was already a favorite area for rural re-treat. In the establishing legislation, Rock Creek Park was 'dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people of the United States.'" The park would "provide for the preservation from injury or spoliation of all timber, animals, or curiosities within said park, and their retention in their natural condition, as nearly as possible."

The Rock Creek Park authorization came at a significant time in the development of what would later become the National Park System (NPS). In 1872, Congress had reserved the first area titled a national park, Yellowstone, "as a public park or pleasuring-ground for the benefit and enjoyment of the people". Its authorizing legislation went on to prescribe regulations to "provide for the preservation, from injury or spoliation, of all timber, mineral deposits, natural curiosities, or wonders within said park" and their retention in their natural condition."]

### **Archeology and History in Rock Creek Park**

Fieldwork has recently been completed for the archeological survey and inventory of Rock Creek Park in Washington, DC, funded by the NPS, National Capital Region. The finds to date include a series of extraordinarily rich Native American camp sites used repeatedly between 2500 BC and AD 1400, colonial tenancies, nineteenth-century dwellings, and Civil War military artifacts from the Battle of Fort Stevens in 1864. Documentary research has uncovered many interesting details about the history of the park, and many of the archeological sites can be associated with known historical characters, from John Carroll of Annapolis to African-American tenants of the 1890s. The story of the park is long and fascinating, and this study is helping to bring it to light.

### **The Rock Creek Park Archeological Survey**

Rock Creek Park is a 1755-acre wooded oasis in the heart of Washington, DC. Besides the main block of land along Rock Creek, the park includes numerous parcels scattered across northwest Washington, which total an additional thousand acres. Before the park was established in the 1890s, this land had been inhabited for thousands of years. An archeological survey of the park has been underway since 2003. The project has been funded through the NPS System wide Archeological Inventory Program, and The Louis Berger Group.

The park contains numerous small Native American campsites as well as several other remarkable sites. Along Piney Branch, a tributary of Rock Creek, are large beds of quartzite cobbles that were intensively quarried between 2500 - 2000 BC. William Henry Holmes of the Smithsonian's Bureau of Ethnography investigated these quarries in the 1890s, and they played an important role in resolving an early debate about the antiquity of human presence in the Americas. Working in the quarries along Rock Creek, Holmes was able to show that what others took to be ancient hand axes were just the early stages of a manufacturing process that eventually led to finely made spear points. Recent study showed that one of Holmes' largest quarry sites is still intact in the park; the site was mapped during this project, and a number of bifaces and a stone ax or maul were found.

Fort Stevens served as the focal point for defending Washington, DC during a confederate attack in July of 1864 and is one of nine Civil War installations under the stewardship of Rock Creek Park.

Rock Creek Park provides for a variety of animal and plants, including coyotes, raccoons, owls, deer and many species of trees. In addition, it is an important stop of and resting spot for neo-tropical migrant birds on their way south to their wintering grounds or on their way north to their breeding grounds.

Rock Creek Park preserves a Piedmont stream valley in a heavily urbanized area and provides a sanctuary for many rare and unique species. The park is approximately 15 km (9.3 miles) long and up to 1.6 km (1 mile) wide. It extends southward from the Maryland – Washington, D.C., border to the Potomac River along Rock Creek valley.

### **Background Information of Tour Sites:**

**Site #1:** At the historic Millhouse Ford, contractors modified the elevation of the ford to allow fish passage. Two abandoned sanitary sewer lines was removed and a third active sanitary sewer line was backwatered to allow fish passage. Boulder-step pools were used to establish grade control and the appropriate backwater condition.

**Site #2:** At the historic 1820 Peirce Mill Dam, a fish way” has been constructed to allow fish to swim upstream while maintaining the historic landscape provided by the dam. This is the most complex of the fish passage projects. The new “fishway” benefits the following migratory fish species: Alewife, Blue back Herring, Striped Bass, Yellow Perch, White Perch, Hickory Shad, and American Eel.

**Site #3:** Peirce Mill was built in the 1820's, and operated commercially until 1897. The United States Government acquired the mill as part of Rock Creek Park in 1892. Currently the mill is not operating. It is being preserved and ultimately will be made operable again when sufficient funding for repairs is made available. Peirce Mill is on the National Register of Historic Places.

The American Industrial Revolution took place between 1780 and 1860. It was a time of immense change in technology spurred mostly by the need to "do more with less people." Because the nation was expanding westward, able-bodied men were needed to blaze trails, set up posts and fight Native Americans. There simply were not enough people to do all the work. Therefore, many of the technological changes, like those inside Peirce Mill, made jobs simpler and reduced the number of people needed to complete them. Peirce Mill became famous as the only 19th century gristmill operating full time in the NPS system. The site operated off and on until April 1993 when it was determined that the wooden waterwheel and attached mechanical components were too deteriorated to run safely. As a result, Peirce Mill ceased operating. Currently the Friends of Peirce Mill are working with Rock Creek Park to raise the needed funds and supply volunteer help to preserve the mill. Until then, Peirce Barn remains open to the public as a museum and ranger contact station

Many things have changed since 1820. Cars replaced wagons, streets were paved and the outskirts of Washington, D.C. changed from rural agriculture to an inner-city business district. Sometimes it is hard to picture a time without computers, television, radio, electricity, or telephones. Just like today, people in the 1820-40's depended on corn and wheat products to supply much of their dietary needs. Mills, such as Peirce Mill, used the power of water to commercially clean, grind, sift and package flour, grits, corn meal, cereal, and bran. As technology progressed, these mills were replaced with new technology, and Peirce Mill is now outdated. Today's mills are larger factories utilizing metal rollers and better cleaning methods. However, at least one thing is still true- mills are more than just a place to grind up corn and wheat. It is a place that turns the crops grown by the farmer into food that feeds the community.

The milling process is simple. First, the grain is cleaned in the smutter, where all the dirt, mold and bugs are removed. Next, the grain is ground into meal by two large grindstones. Within the meal, there are smaller particles called flour, medium size particles called cereal, and larger flakes called bran. After being cooled in the hopper boy, the meal is sent through a bolter or sifter. The bolter separates the flour, the cereal and the bran. Each is then packaged in either barrels or cloth bags. Wheat and corn can be found in a variety of foods. Breads, pasta, cakes, cookies and pizza dough come from wheat. Corn muffins, tortillas, corn bread, and grits are derived from corn. In addition, many cereals have corn bran or wheat bran as ingredients. Corn and wheat meal are often used to feed farm animals including chickens, pigs and cows. Therefore, other food including steaks, eggs, pork and milk are also indirectly related to milling.

**Rock Creek Stream Restoration Goal** is to restore upstream fish migration in Rock Creek by removing or modifying existing “in-stream” fish barriers. Restoration will include the removal of abandoned fords and sewer lines, modification of existing fords, creation of natural pools and the construction of a “fish way” at Peirce Mill Dam. Eight locations along Rock Creek where construction activities will be completed. All of the construction projects will be completed “in-stream” using a combination of heavy equipment and manual labor.

This enhancement activity is a portion of the environmental mitigation plan for the Woodrow Wilson Bridge Project. This and other projects in Maryland and Virginia are intended to offset environmental impacts to natural resources associated with construction of the new Woodrow Wilson Bridge and its contributing interchanges. This Project is a result of the cooperative efforts of the National Park Service, the Maryland State Highway Administration, the Federal Highway Administration, the Virginia Department of Transportation, the District of Columbia Department of Health- Fisheries Division and the Smithsonian National Zoological Park.

**Site# 4: The National Arboretum** established in 1927 by an Act of Congress. The Arboretum is administered by the U.S. Department of Agriculture’s Agricultural Research Service. The mission is to serve the public need for scientific research, education, and gardens that conserve and showcase plants to enhance the environment.

The National Arboretum is the world’s largest and most diverse systematic collection of seeds of flowering and coniferous plants is now part of the U.S. National Arboretum. This collection contains approximately 125,000 dried seed and fruit samples from plants throughout the world. The collection is focused on economically important plants and the germplasm accessions of the U.S. Department of Agriculture over the last 110 years. Over 27,000 different species of plants representing 397 families and 13,000 genera of plants are represented in this extraordinarily valuable collection. The samples are now stored in either glass vials or plastic bags. The collection is maintained in a secure, moveable, compact storage facility

## **Directions to Rock Creek Nature Center and Planetarium**

**5200 Glover Road NW, Washington, DC 20015**  
**(near the intersection of Military Road and Glover Road)**

**Via Route 66:** Take Route 66 across the Teddy Roosevelt Bridge. Get in the right lane on the bridge, and take the ramp for Independence Avenue. Turn right at the bottom of the ramp (heading towards the Kennedy Center along the river; this is Ohio Drive, but it is not marked as such). After passing the Kennedy Center (under its terrace) and Watergate, continue straight onto Rock Creek Parkway. When the parkway ends (near Connecticut and Calvert), continue north on Beach Drive. You will pass the zoo and Pierce Mill. Continue on Beach Drive until you see a sign for the Nature Center bear left here (onto Glover Road), as the sign instructs. (\*On weekends, there will be a gate across Beach Drive, so you will be unable to go to the right!) Follow the signs to the Nature Center. Via the Beltway or Maryland: Take the Beltway north into Maryland; exit at Connecticut Ave. and proceed southbound toward Chevy Chase. About 7-8 blocks south of Chevy Chase Circle, turn left onto Military Road. Go a little over a mile, and you will see a big brown sign that says "ROCK CREEK PARK-NATURE CENTER..."etc. Take the next right (at the traffic light), as the sign instructs, and follow subsequent signs to the Nature Center.

**Via the Chain Bridge (VA):** At the end of the bridge, turn right onto Canal Road. Make the first left (at the light) onto Arizona Avenue. Proceed on Arizona until you come to a "T" intersection; make a right turn there onto Nebraska Ave. (The signs there may say "Loughboro Rd.," but it runs into Nebraska.) Proceed on Nebraska past American University, around Ward Circle, and across Wisconsin and Connecticut Avenues. Get into the right lane and turn right onto Military Road; less than 1/2 mile after you cross Connecticut. After a little less than a mile, you will see a big brown sign that says "ROCK CREEK PARK-NATURE CENTER..."etc. Take the next right (at the traffic light), as the sign instructs, and follow subsequent signs to the Nature Center.

**From Dupont Circle:** Proceed Northeast on New Hampshire Avenue for approximately half a mile when it will intersect 16th Street. Head north on 16th Street, towards the Maryland border. About 3 1/4 miles up the road, it will intersect Military Road, after Madison and Nicholson Streets. Take the right hand exit onto Military Road west (cloverleaf ramp). Cross Military Bridge and then it will turn into a small parkway. Get in the left-hand lane. Make a left at the first light that you come to, at Glover and Oregon Roads. You are now on Glover Road and can follow the signs to the Nature Center.

**From Maryland via the Beltway:** Exit #31, MD 97 South/Georgia Ave., go south for 0.5 mi. then turn slight right on 16<sup>th</sup> Street/MD 390 South, take the Military Road West ramp toward Connecticut Ave., merge on to Military Rd. NW, turn left on Glover Rd. NW, end at 5200 Glover Rd.

## **Directions to the U.S. National Arboretum**

The National Arboretum is located in the northeast section of Washington, DC, approximately ten minutes from the Capitol Building. There are two entrances: one at 3501 New York Avenue, NE, and the other at 24th & R Streets, NE, off of Bladensburg Road.

**From Northwest Washington** - Follow New York Avenue east to the intersection of Bladensburg Road. Turn right (south) onto Bladensburg Road and go 4 blocks to R Street. Make a left on R Street and continue 2 blocks to the Arboretum gates.

**From the Maryland suburbs** - Take the Capital Beltway (I 495/I 95) to exit 22B (Baltimore Washington Parkway) towards Washington. Follow the Baltimore Washington Parkway approximately 7 miles to Route 50 West (New York Avenue). Once on Route 50 get in your left lane. You will approach the intersection of Bladensburg Road where only the two left lanes turn onto Bladensburg Road. Make the left onto Bladensburg Road and go 4 blocks to R Street. Make a left on R Street and continue 2 blocks to the Arboretum gates.

**From Virginia (I 395)** - Follow I 395 North over the 14th Street Bridge. Bear right at the end of the bridge to follow signs to 395 North. Continue to follow signs to 395 North (the lanes for 395 are to the right--pay attention). The 395 lanes go under a tunnel at 3rd Street. Continue following signs for 395 North. The tunnel will dead end at New York Avenue, where all lanes are forced to turn right. Continue on New York Avenue until the major intersection with Bladensburg Road (there will be large green traffic signs overhead; also, it's about 2.5 miles from the end of the freeway to the right turn on Bladensburg). Turn right onto Bladensburg Road and go 4 blocks to R Street. Make a left on R Street and continue 2 blocks to the Arboretum gates.

**From Virginia (I 95 - I 295)** - Follow I 95 North and cross the Wilson Bridge. Stay in the right lane over the bridge. Bear onto I 95/I 295 North to Washington. Follow I 295 to the exit for Route 50 West (New York Avenue). Once on Route 50 get in your left lane. You will approach the intersection of Bladensburg Road where only the two left lanes turn onto Bladensburg Road. Make the left onto Bladensburg Road and go 4 blocks to R Street. Make a left on R Street and continue 2 blocks to the Arboretum gates.

**From Virginia (I 66)** - Cross the Roosevelt Bridge and follow Constitution Avenue past the Capitol Building. Bear left onto Maryland Avenue. Follow Maryland Avenue to Bladensburg Road. Make a left onto Bladensburg Road and travel 1 mile to R Street. Make a right onto R Street and continue 2 block to the Arboretum gates.

**By Metrorail:** On weekdays: The closest Metrorail subway stop is Stadium Armory Station on the Blue and Orange lines. Transfer to the B2 Metro bus; disembark the bus on Bladensburg Road at Rand Street, just past the Arboretum sign on the right. Walk back to sign at R Street and walk down R Street 2 blocks to Arboretum entrance.