

Rock Creek Park Map Western Ridge Trail Valley Trail

Smithsonian Associates: Rock Creek Park, June 2022

Nature/History Hikes with Melanie Choukas-Bradley

Books and Other Resources

Books

Books by Melanie Choukas-Bradley available at Politics & Prose

A Year in Rock Creek Park—the Wild, Wooded Heart of Washington, DC City of Trees—The Complete Field Guide to the Trees of Washington, DC Finding Solace at Theodore Roosevelt Island (includes Rock Creek Park passages) The Joy of Forest Bathing—Reconnect with Wild Places & Rejuvenate Your Life Theodore Roosevelt—Naturalist in the Arena, edited by Char Miller & Clay S. Jenkinson with a chapter by Choukas-Bradley titled "Urban Wild—Theodore Roosevelt's Explorations of Rock Creek Park" (This book not on shelves; ships in 1-5 days)

Books about Rock Creek Park History

A History of Rock Creek Park: Wilderness & Washington, DC by Scott Einberger

Rock Creek Park A to Z by David Swerdloff & Lorraine Swerdloff

Peirce Mill: Two Hundred Years in the Nation's Capital by Steve Dryden

Bold, Rocky, & Picturesque: The Archeology & History of Rock Creek Park by John Bedell, Stuart Fiedel & Charles LeeDecker

Rock Creek Park by Gail Spilsbury

Map

Potomac Appalachian Trail Club Map N: Trails in the Rock Creek Park Area, District of Columbia (Order via www.patc.net)

Websites

National Park Service for Rock Creek Park: www.nps.gov/rocr

Rock Creek Conservancy: www.rockcreekconservancy.org

Friends of Peirce Mill: www.friendsofpeircemill.org

Smithsonian Associates Rock Creek Park Walks with Melanie Choukas-Bradley, June 2022

Subject: Rock Creek Park Geology—Maryland/DC line to the National Zoo

From: Joe Marx, Geologist To: Melanie Choukas-Bradley

Date: Email dated November 22, 2010 (shared with permission, 2022)

With minor exceptions, any bedrock exposed along Rock Creek north of the zoo and south of the Maryland line is the Laurel Formation. The exposures are places where near verticality has made it impossible for soil to accumulate.

The Laurel started more than half a billion years ago as undersea landslide deposits in the vicinity of a mid-ocean volcanic island arc.

About 475 million years ago, the arc was pulled by subduction onto the edge of Laurentia (proto-North America). The Laurel deposits were shaved off the sea floor, pushed up onto Laurentia and metamorphosed to schist grade during this tectonic collision. As Earth's continents--including Laurentia--gradually merged into Pangea by about 350 million years ago, further collisions extinguished the ocean in which the Laurel was originally deposited.

The appearance of layering in the Laurel, as well as its tendency to weather into flat slabs, is a result of metamorphic foliation. The crystals in the rock were essentially squeezed flat by the immense pressures generated during the tectonic collision. Under the microscope, they look rather like thick piles of old wet leaves on a forest floor, hence the term "foliation".

Because the Laurel originated as landslides, the formation is often studded with irregularly shaped bits of miscellaneous rock. They can be seen as slight protrusions or indentations at the outcrop north of Pulpit Rock, and also as blackish (non-lichenous) areas on the surface of Pulpit Rock.

Keep in mind that from the time they were metamorphosed until relatively recently, the Laurel rocks were located thousands of feet below the ground. Erosion and compensating uplift have brought them up to where we can see them.

--Joe Marx

ROCK CREEK PARK PLANT & WILDLIFE LIST PEIRCE MILL AREA—Floodplain and Upland Woods

Smithsonian Associates Nature/History Hike with Melanie Choukas-Bradley, Author of A Year in Rock Creek Park, City of Trees, Finding Solace at Theodore Roosevelt Island & forest bathing books June 2022

Woody Plants (*Non-Natives) Trees unless identified as Shrub or Vine

Acer negundo Box-Elder or Ash-Leaved Maple

Acer platanoidesNorway Maple*Acer rubrumRed MapleAcer saccharumSugar MapleAcer saccharinumSilver Maple

Ailanthus altissima Ailanthus or Tree of Heaven*

Albizia julibrissin Mimosa or Silk-Tree*

Amelanchier Shadbush or Serviceberry

Asimina triloba Pawpaw Betula nigra River Birch

Carpinus caroliniana American Hornbeam, Ironwood or Musclewood

Carya cordiformis Bitternut Hickory
Carya glabra Pignut Hickory
Carya illinoinensis Pecan (planted)

Carya ovata Shagbark Hickory (planted) Carya laciniosa Shellbark Hickory (planted)

Carya tomentosa Mockernut Hickory

(C. alba)

Catalpa speciosa Northern Catalpa (native to the midwest;

naturalized)

Cercis canadensis Redbud

Chionanthus virginicus Fringe-Tree (small tree or shrub)

Cornus florida Flowering Dogwood

Diospyros virginiana Persimmon

Euonymus americanus Strawberry Bush (shrub)

Fagus grandifolia American Beech Fraxinus americana White Ash Fraxinus pennsylvanica Green Ash

Hamamelis virginiana Witch-Hazel (shrub or small tree with yellow late-

autumn flowers)

Hydrangea arborescens Hydrangea, Wild (shrub)

Ilex opacaAmerican HollyJuglans nigraBlack Walnut

Juniperus virginiana Eastern Red-Cedar, Virginia Juniper

Kalmia latifolia Mountain Laurel (evergreen shrub)

Lindera benzoin Spicebush (shrub)

Liquidambar styraciflua Sweetgum (planted near Peirce Mill & Milkhouse

Ford)

Liriodendron tulipifera Tulip-Tree (Tulip Poplar)
Magnolia grandiflora Southern Magnolia (planted)

Magnolia macrophylla Bigleaf Magnolia (naturalized from the south)

Magnolia tripetala Umbrella Magnolia

Magnolia virginiana Sweetbay Magnolia (planted here)

Malus spp. Apples and Crabapples (young trees in orchard)

Morus alba White Mulberry*

Nyssa sylvatica Tupelo (Black or Sour Gum)

Ostrya virginiana Hop-Hornbeam

Paulownia tomentosa Paulownia, Princess or Empress Tree*

Pinus echinataShortleaf PinePinus rigidaPitch PinePinus strobusWhite PinePinus taedaLoblolly Pine

Pinus virginiana Scrub or Virginia Pine

Platanus occidentalis Sycamore
Prunus serotina Black Cherry

Pyrus communis cultivars Pears (Bartlett & Anjou)* (young trees in orchard)

Quercus alba White Oak

Quercus bicolor Swamp White Oak (possibly planted)

Quercus coccinea Scarlet Oak Quercus falcata Southern Red Oak

Quercus lyrata Overcup Oak (probably planted)

Quercus michauxii Swamp Chestnut Oak or Basket Oak (planted)

Quercus montana Chestnut Oak

(Q. prinus)

Quercus palustris Pin Oak

Quercus phellos Willow Oak (possibly planted)

Quercus rubra Northern Red Oak

Quercus stellata Post Oak Quercus velutina Black Oak

Rhododendron periclymenoides Pinxter Flower or Wild Azalea (shrub)

Rhodotypos scandens
Robinia pseudoacacia
Sassafras albidum

Jetbead* (shrub)
Black Locust
Sassafras

Smilax glauca Glaucous Greenbrier (vine with persistent leaves)

Smilax rotundifolia Greenbrier, Common

Staphylea trifolia Bladdernut (large shrub or small tree)

Taxodium distichum Bald-Cypress (planted)

Tilia americana American Basswood or Linden Toxicodendron radicans Poison-Ivy (vine or shrub)

(Rhus radicans)

Ulmus americana American Elm

Vaccinium pallidumLowbush Blueberry (shrub)Viburnum acerifoliumMaple-Leaved Viburnum (shrub)Viburnum dentatumArrowwood Viburnum (shrub)

Viburnum prunifolium Blackhaw Viburnum (shrub or small tree)

Invasive Woody Vines & Shrubs

Ampelopsis brevipedunculata Porcelain-Berry*
Celastrus orbiculatus Oriental Bittersweet*

Clematis terniflora Japanese Virgin's Bower* (herbaceous or

slightly woody)

Euonymus alatus Winged Euonymus or Burning Bush* (shrub)

Euonymus fortunei Climbing Euonymus*

Hedera helix English Ivy*

Lonicera japonica Japanese Honeysuckle* Lonicera maackii Asian Honeysuckle*

Vinca minor Periwinkle (slightly woody trailing vine)*

Invasive Herbaceous Plants

Alliaria petiolata Garlic Mustard*

Ficaria verna (Ranunculus ficaria) Lesser Celandine*

Polygonum cuspidatum Japanese Knotweed* (3-angled fruit; shrub-like)

(Reynoutria japonica)

Perilla frutescens Perilla, Beef-Steak Plant* Youngia japonica Asiatic Hawksbeard*

Wildflowers (not all are blooming now)

Chimaphila maculata Striped or Spotted Wintergreen (evergreen half-

shrub)

Circaea canadensis Enchanter's Nightshade

(C. lutetiana)

Conopholis americana Bear Corn or Squawroot (parasitic wildflower; tree

roots)

Cryptotaenia canadensis Honewort or Wild Chervil

Epifagus virginiana Beechdrops (parasitic wildflower; beech roots)
Epigaea repens Trailing Arbutus (evergreen; blooms in early

spring)

Erigeron philadelphicus Philadelphia Fleabane or Common Fleabane

Galium aparine Cleavers, Catchweed (a bedstraw)

Geum canadense White Avens

Houstonia caerulea Bluets, Quaker Ladies Hydrophyllum virginianum Virginia Waterleaf Lysimachia ciliata Fringed Loosestrife

Maianthemum racemosum Plumed Solomon's-Seal or False Solomon's-Seal

Medeola virginianaIndian Cucumber-RootMitchella repensPartridgeberry (evergreen)

Osmorhiza claytonii Sweet Cicely

Podophyllum peltatum Mayapple

Phytolacca americana
Ranunculus abortivus
Ranunculus bulbosus
Sanicula odorata
Stellaria pubera
Tipularia discolor

Pokeweed or Pokeberry
Kidneyleaf Buttercup
Bulbous Buttercup*
Clustered Snakeroot
Star Chickweed
Cranefly Orchid

Verbesina alternifolia & Wingstem (late summer blooms)

other *Asteraceae* spp. Asters, Goldenrods, Eupatoriums, Bidens

Viola sororia Common Blue Violet

Evergreen Ferns

Polypodium virginianum Common Polypody (Rock Polypody)
Polystichum acrostichoides Christmas Fern

Wildlife

Beaver, Muskrat, Red Fox, Gray Fox (uncommon), Coyote, White-Tailed Deer, Raccoon, Opossum. Spring Spawning Fish: Herrings—Alewife, Blue-Back Herring (both anadromous), Gizzard Shad (lives in Potomac), hope for return of Hickory and American Shad (both anadromous). Snapping Turtle, Box Turtle, Painted Turtle (and other species), Northern Water Snake (and other species), Barred and Screech- Owls, Wood Duck, Mallard Duck, Belted Kingfisher, Wild Turkey, Great Blue Heron, Black-Crowned Night-Heron, Red-Shouldered, Red-Tailed and Cooper's Hawks, Bald Eagle, Pileated Woodpecker and several other Woodpeckers, Wood Thrush, American Robin, Ovenbird, Eastern Wood-Pewee, Phoebe, Acadian Flycatcher, Red-Eyed Vireo, Carolina Wren, Carolina Chickadee, Northern Cardinal, Eastern Towhee, White-Breasted Nuthatch and many other birds.