



National Park Service

Natural Resource Quarterly | Winter 2023

Newsletter of Natural Resources in the National Capital Region



At Catoctin's Poplar Grove, dense undergrowth of invasives (left), was cleared using a masticator (center), to create areas open for native tree planting (right). Credit: NPS/Michael Gismer.

Catoctin Uses Masticator in Forest Restoration Project

A forest with hundreds of dead ash trees (victims of emerald ash borer) that's been invaded by an impenetrable thicket of thorny non-native shrubs, is a real challenge to stand in. Or walk in. Let alone try to replant trees in.

That's why staff at Catoctin Mountain Park recently used a new method to clear a nearly 20-acre patch of forest near an old campground called Poplar Grove, overgrown with Japanese barberry and other brambles. The area was an agricultural field in the 1930's before it became public land. They brought in a large piece of equipment called a masticator (literally a "chewer") to clear invasive brush from the area. (It's basically a skid steer on track treads instead of wheels that's mounted with a horizontal chipping drum.) Experienced NPS staff from Delaware Water Gap National Recreation Area used the masticator to chop, chip, and shred the woody tangle into mulch, clearing the area of all but mature trees for a planned planting of over 5,000 native trees this coming fall. Of course, anyone who's tried to get rid of an invasive knows—they can quickly regrow. So the park has made sure the contractor they hired for this project has a required 3-4 years of site

maintenance including integrated pest management and is held to a 97% survivability requirement for their planted trees.

Catoctin Mountain Park has actively managed their forests for more than a decade by removing invasive plants and managing overabundant deer populations. In this time the park has seen a 21-fold increase in seedling density. The effort at Poplar Grove is part of a larger project funded by the Inflation Reduction Act. This in turn is part of a nationwide effort to restore natural habitats and address climate change impacts. The funding helped cover things like the archeological Phase I survey needed in advance of reforestation efforts. (Archeology is required by NHPA Section 106 before holes can be dug for planting trees.) This and other forest restoration efforts will create habitat for state and federally listed species, including the endangered northern long-eared bat, Indiana bat and proposed endangered tricolored bat.



Beech leaves showing characteristic striping pattern of beech leaf disease. Credit: NPS/Andrejs Brolis.

Beech Leaf Disease Spreading at Prince William

Beech leaf disease (BLD) was first identified in Prince William Forest Park in 2021. The disease was not detected in the park's long-term forest monitoring plots regularly visited by the National Capital Region Inventory & Monitoring Network (NCRN I&M) until the following year. In 2022, BLD showed up in 5% of the plots with beech trees and in 2023, BLD was found in 45% of plots with beech—an alarmingly fast spread!

NCRN I&M monitors forest condition in 145 plots in Prince William, and visits about a quarter of those plots each year.

[Read more about beech trees in NCRN-monitored parks.](#) A more in depth look at NCRN data on BLD and other forest pests is planned for

early 2024.

Year	Total Plots	Plots w/ Beech	Beech Plots w/ Beech Leaf Disease	% Beech Plots w/ Beech Leaf Disease
2019	33	31	0	0
2021	33	30	0	0
2022	44	38	2	5%
2023	35	31	14	45%

Table: Spread of beech leaf disease at Prince William Forest Park



Left: An archeologist uses ground penetrating radar. Right: kids examine stream macroinvertebrates. Credits: NPS

Spotlight is Coming!

All are welcome at the upcoming **Spotlight on National Park Resources in the National Capital Region** on **April 4, 2024!** The hybrid event will be held in-person at the National Conservation Training Center (NCTC) in Shepherdstown, WV, with an option to join virtually through Teams.

Come and spend the day learning through presentations and posters about recent science, stewardship, and research on park natural and cultural resources. This meeting allows park managers to interact one-on-one with the researchers and graduate students and identify areas of interest to pursue in their own park. All are welcome to attend.

This National Capital Region event is hosted by the Urban Ecology Research Learning Alliance and the Cultural and Natural Resource Advisory Teams. Contact [Diane Pavek@nps.gov](mailto:Diane_Pavek@nps.gov) for details.



Snowball and Doublefile viburnum, both forms of *Viburnum plicatum*. Credits clockwise from upper right: snowball flowers, Charlie H (CC BY-NC 4.0); snowball flowers, Henggang Cui (CC0 1.0); and fruits, Lynn Harper (CC0 1.0).

Six Invasive Viburnums in the Greater Washington Area

[Learn about six invasive viburnums commonly found in the DC, Maryland, and Virginia region.](#) All are native to East Asia, primarily China and Japan, brought in for ornamental use and are still sold commercially. They outcompete native flora, including our own native viburnums, due to dense growth and vigorous fruit production.

[Visit the new Chesapeake Watershed Cooperative Ecosystem Studies Unit \(CW CESU\) website: cwcesu.org](http://cwcesu.org)



Grassland birds are among the fastest declining bird species in the United States. Credit: Cornell Lab of Ornithology.

Forest and Grassland Bird Briefs

NCR Inventory & Monitoring is happy to share two new bird resource briefs featuring both grassland and forest interior birds of the National Capital Region.

[Battling to Save Battlefield Birds](#) discusses a recent analysis of how grassland management at parks can affect the survival and reproduction of eastern meadowlarks and grasshopper sparrows. The findings shared in this piece are based on a newly published journal article by Megan Massa et al. Read the study here:

[Response of grassland birds to management in national battlefield parks - Massa - The Journal of Wildlife Management.](#)

[NCR's Forest Interior Birds](#) explores how forest interior breeding birds are faring in NCR parks with a particular focus on wood thrush, ovenbird, Kentucky warbler, Louisiana waterthrush, hooded warbler, and scarlet tanager. This analysis is based on master's thesis research by collaborator Hannah Redmond.

Calendar

2024

January

Natural Resource Advisory Team (NAT) meeting. 9:00 AM - 12:00 PM. Manassas National Battlefield Park Headquarters. This meeting includes a virtual option.

April

3. **Twelfth Spotlight on National Park Resources in the National Capital Region.** National Conservation Training Center (NCTC) in Shepherdstown, WV. Virtual attendance option through Teams. Registration forthcoming. Contact [Diane Pavek@nps.gov](mailto:Diane_Pavek@nps.gov) for details.

ICYMI: Two Flamingos in Chincoteague, VA (Washington Post, 10/20/23): [Chincoteague, known for wild ponies, is enthralled by its flamingos](#)

The Natural Resource Quarterly provides updates on the status of natural resources and science in National Capital Region parks.

[NCR Natural Resources](#) | [Previous Issues](#) | [NCR Inventory & Monitoring](#)