



Natural Resource Quarterly | Winter 2017

Newsletter of the *National Capital Region Inventory & Monitoring Network*



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An I&M Forest Monitoring Anniversary!

Why all the fuss for 3 candles on a cake? The fact that NCRN I&M has now completed 3 full monitoring cycles of all 426 forest plots in NCR parks may not sound like much, but it is. Three sessions of intense measuring, identifying, and recording in the same locations every 4 years, allows us to start to see discernable direction in forest changes. (Not to mention that at a pace of a little over 100 plots per year, 3 cycles represents 12 years of effort...)



[\(Read more\)](#)

Autumn Invader: Italian arum



by Mark Frey, Exotic Plant Management
Team Liaison

The non-native plant Italian arum (*Arum italicum*), is kind of like an unwelcome night-owl roommate who raids the fridge while everyone sleeps and co-opts shared spaces with their stuff. Literal turf wars can erupt!

Many invasive non-native species like Italian arum have life histories that are somewhat out of sync with native plants. Their off-schedule habits (asynchronous phenologies) can let them take advantage of light when other plants have already shed their leaves and perhaps take in other resources when native species have already shut down.

[\(Read more\)](#)

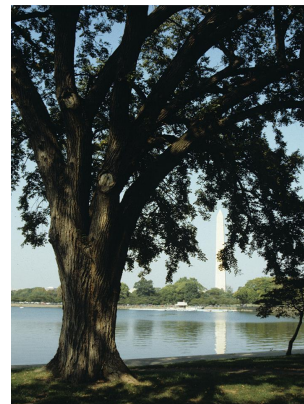
[Photo: Italian arum. Credit: Barry Rice, sarracenia.com, Bugwood.org]

Ongoing CESU Natural Resource Projects

Ever wondered about some of the natural resource projects happening in your park? Science and research in parks takes many forms and involves many collaborators both inside and outside the NPS. This is a summary of those projects in National Capital Region parks that are facilitated by the Chesapeake Watershed Cooperative Ecosystems Study Unit (CW CESU):

([Read more](#))

[Photo: American elm on National Mall. Credit: NPS]



Bat Surveys in NCR: Interim Report



[Photo: Mexican free-tailed bat. Credit: Ann Froschauer/USFWS]

by NCR Wildlife Biologist Scott Bates

So far, bat monitoring in the National Capital Region has produced heartening results about the prevalence of federally listed species, and the diversity of bat species present in the region. Here are highlights from August 2016 to August 2017 monitoring.

([Read more](#))

Dyke Marsh Restoration Update

[Photo: 1927 image of Dyke Marsh showing original thumb-like promontory at bottom.]

by Alexcy Romero, Superintendent, George Washington Memorial Parkway

The Fairfax County Wetlands Board, at a September 12, 2017 public hearing, unanimously approved a joint permit application from the National Park Service and U.S. Army Corps of Engineers for a wetland restoration project at the Dyke Marsh Wildlife Preserve. This is part of a multi-step process required to obtain the federal, state and local permits for marsh enhancement and restoration activities. After hearing numerous public statements, mostly in favor of the project, the Board voted to approve the first phase of the application. This phase involves the construction of a 1,535-foot armor stone breakwater to replicate a promontory of land that existed prior to 1950. This functioned to protect the marsh from northerly tracking storms and hurricanes.



Between 1940 and 1972, approximately 270 acres of original marsh were lost from mining activities. With the removal of the promontory in the 1950s and cessation of mining in the early 1970s, the marsh continued to lose acreage through storm events and other erosive forces. Approximately 50 acres of marsh remain today. The breakwater will protect this remaining marsh. In addition, the Board also approved the restoration of 5.45 acres of

tidal marsh to replace a small portion of marsh acreage that has been lost to mining and erosion. On September 26, 2017, I signed the wetlands permit. On September 30, 2017, the U.S. Army Corps of Engineers, Baltimore District, awarded a contract for the first phase of the restoration project. The \$10.12 million contract will construct a 1,500-foot jetty to stabilize the shoreline and protect the existing marsh. NPS anticipates that construction will begin in early 2018 after the final permits are in place. In 2018, NPS also anticipates awarding a second phase contract to reconstruct approximately five acres of marshland.

Possible Garlic Mustard Biological Control - Update



As an invasive plant, garlic mustard (*Alliaria petiolata*) has been with us for quite a while. It is one of the few herbaceous exotic plants that invades and dominates forest understory communities. So knowing that a biocontrol – a natural enemy that's target specific - might be on the way is welcome news.

The root-mining weevil *Ceutorhynchus scrobicollis* that attacks garlic mustard, recently made it one step closer approved release in North America. In February it was recommended for permitting by a 19-member scientific review panel that advises the US Department of Agriculture's Plant Protection and Quarantine program (part of the Animal and Plant Health Inspection Service, APHIS).

C. scrobicollis needs garlic mustard to survive and reproduce and is also highly damaging to garlic mustard.

The next steps for the weevil are a review by APHIS staff who do permitting of weed biological control agents, a U.S. Fish and Wildlife Service review for compliance with the Endangered Species Act, and additional APHIS review for compliance with the National Environmental Policy Act and executive orders on tribal coordination.

[Photo: the root-crown mining weevil *Ceutorhynchus scrobicollis*. Credit: USDA Agricultural Research Service]

Inventory & Monitoring Field Work in Your Park

During winter (December - February), most field work stops, with the exception of stream water monitoring.

Stream Water Monitoring Discrete water monitoring occurs bi-monthly at 37 streams throughout all NCR parks except C&O Canal National Historical Park and National Mall and Memorial Parks.

Continuous water loggers are currently deployed in Antietam Creek, North and South Forks of Quantico Creek, and Rock Creek.



Calendar

DECEMBER

8. Maryland Water Monitoring Council Meeting. 8:30 am - 4:30 pm. Maritime Institute, North Linthicum, MD.

JANUARY

12. Abstracts due for 2018 Spotlight on National Park Resources in the National Capital Region. Contact [Andrew Landsman](#).

18. Natural Resource Advisory Team (NAT) Meeting. Prince William Forest Park. (Snow date January 25)

APRIL

25. 2018 Spotlight on National Park Resources in the National Capital Region. National Conservation Training Center, Shepherdstown, WV. Contact [Ann Gallagher](#).

JULY

19. Natural Resource Advisory Team (NAT) Meeting. National Mall and Memorial Parks.

Have a question or an idea for the next newsletter? Send it to Megan_Nortrup@nps.gov

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