



Natural Resource Quarterly | Spring 2018

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



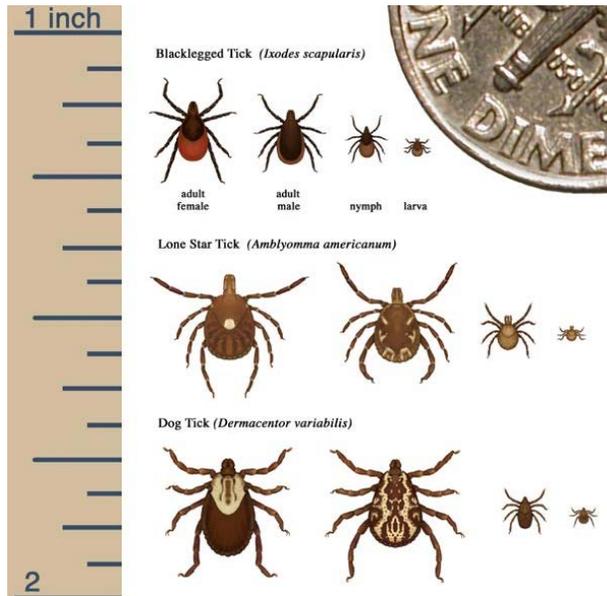
In This Issue:

- Ticked Off About Rocky Mountain Spotted Fever
- A Little TLC for Elms on the Mall
- Ash Update
- Spring Wildflower Walk at Carderock
- Forest Regeneration
- Hemlocks in NCR
- The Spotlight
- I&M Field Work in Your Park
- Calendar

Ticked Off About Rocky Mountain Spotted Fever

By now many of us have absorbed the most important messages about ticks and Lyme disease. We dutifully apply permethrin to our boots, avoid unneeded walks through tall grass, and do tick checks right after coming indoors. We know ticks are active more in warm weather and that nymphs are the most likely to transmit disease. And hopefully, most of us know that if you remove an attached tick quickly (within 24 hours) you can greatly reduce your chances of getting Lyme.

Yet even with all that good knowledge about avoiding Lyme, it might come as a surprise to learn that in **December** last year an NCR park visitor fell ill quickly with a rash and encephalitis ascribed to a tick borne disease called Rocky Mountain Spotted Fever. Rocky Mountain Spotted Fever (RMSF) is not a new condition, but it is in a category of illnesses (called Spotted Fever Rickettsioses) that have increased during the last decade. It can be a severe or even fatal illness if not treated in the first few days of symptoms. Typical symptoms include: fever, headache, abdominal pain, vomiting, and muscle pain. A rash may also develop, but is



often absent in the first few days, and in some patients, never develops. Caught early though, like many tick borne diseases, it can be treated with antibiotics.

([Read more](#))

[Image: Identification of blacklegged, lone star, and dog ticks in larva, nymph, and adult stages. Credit: Centers for Disease Control and Prevention]

A Little TLC for Elms on the Mall



The National Mall and Memorial Parks (NAMA) has been focused on upgrading their greenery recently. After an ambitious and successful turf restoration, their eyes have now turned to the graceful and stately elm trees that frame the Mall turf from the Capitol to the Washington Monument.

The American elm trees that line the Mall suffer many of the same stresses as the turf panels. Namely—high visitor use. The large numbers of people that enjoy the shade and beauty of the elms over the years has led to soil compaction and chronic wear and tear. Special events and Dutch elm disease are also stressors to the trees.

But now a new project led by Dr. Nina Bassuk at Cornell University, is underway to examine the elms and the soil they're growing in. The project, facilitated through the Chesapeake Watershed Cooperative Ecosystems Studies Unit (CW CESU), will assess current growing conditions and tree health, make comparisons with historical data, identify growing environment challenges, and then recommend best practices to fix growing deficiencies and define management objectives for future tree health.

([Read more](#))

[Photo: Researchers look at a mature elm tree. Credit: Nina Bassuk]

Ash Update

The state of ash trees in 2017 in the National Capital Region after more than 10 years of harm from the invasive emerald ash borer.

([Read more](#))

[Photo: A white ash leaf with 9 leaflets. Credit: U.S.Department of Agriculture]



Spring Wildflower Walk at Carderock



[Photo: Early saxifrage (*Saxifraga virginensis*). Credit: NPS]

It's not too soon to start thinking about wildflowers... Please join NCRN I&M Botanist Elizabeth Matthews for a wildflower walk! **On April 17** , Matthews will lead a small group to explore wildflowers and other spring plants at C&O Canal's Carderock Recreation Area between 10 am and 2 pm. Meet at the southernmost parking area (turn left after passing under towpath). Depending on spring temperatures, hopefully the group will see spring beauties (*Claytonia virginica*), early saxifrage (*Saxifraga virginensis*), and Jack-in-the-pulpit (*Arisaema triphyllum*), as well as two state-listed plants: few-flowered valerian (*Valeriana pauciflora*) and Coville's phacelia (*Phacelia covillei*).

Participants should bring lunch, water, sunscreen/hat, and any other gear you'd like for the walk (i.e. notebook, camera, hand lens, etc.). A 30 minute lunch break is included. To RSVP, contact Elizabeth Matthews by NPS email by **April 10** .

A map of the area, including Carderock/Billy Goat C trail and parking areas is available at: <https://www.nps.gov/choh/planyourvisit/upload/Great-Falls-hiking-trails-map-accessible.pdf>]

Forest Regeneration

[Photo: Signs of forest vegetation recovery at Catoctin. Photo: NPS.]

Tree seedlings and small saplings are in short supply in the parks of the National Capital Region. Without these trees of tomorrow, what will our forests look like?

([Read more on Forest Regeneration](#))



Hemlocks in NCR



Many evergreen, Eastern hemlock trees, typically found growing alongside forest streams, have succumbed to two insect pests. In the National Capital Region, we looked for surviving trees, and what other tree species are poised to replace hemlocks.

([Read more](#))

[Photo: The white fuzz of hemlock woolly adelgid on a hemlock branch. Credit: NPS]

The Spotlight

Cultural and Natural Resources studies and scholarship

will be highlighted at an all-day event on **April 25, 2018** at the National Conservation Training Center (NCTC) in Shepherdstown, WV. Sixteen speakers have been selected for the 2018 *Spotlight on National Resources in the National Capital Region*. Please RSVP by Thursday April 5, 2018 via the [Google form](#) if you are an NPS Employee. If you are not an employee, email [Kaitlyn Parness](#) for a copy of the Registration Document.



Please extend this invitation to all divisions of your staff, park partners, volunteers in parks, or other individuals who take an active interest in park resources. Contact [Ann Gallagher](#) by NPS email for more information.

[Photo: A silver-spotted skipper--the subject of a Spotlight poster--rests on yellow lantana. Credit: Mariana Abarca]

Inventory & Monitoring Field Work in Your Park

During spring (March - May), I&M field work continues for stream water quality and resumes for amphibians and marsh elevation.



Amphibian Monitoring runs from late March to late July at C&O Canal, Manassas, Prince William, and Rock Creek, and at a yearly rotating group of other NCR parks.

Marsh Elevation Monitoring occurs in spring at freshwater tidal marshes on the Anacostia and Potomac Rivers (in Anacostia Park and Dyke Marsh Wildlife Preserve). The monitoring uses surface elevation tables (SETs) to track the deposition and loss of sediment from marsh surfaces.

Calendar

APRIL

17. Spring Wildflower Walk at Carderock. See article above. Contact [Elizabeth Matthews](#) to RSVP.

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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