

I&M Summer Field Schedule

Check the "NCRN I&M Activity" google calendar for specific dates or contact Megan Nortrup by NPS email for details.

Special for 2015: the NCRN I&M program will conduct an inventory of Eastern hemlocks (dead or alive) and has expanded amphibian monitoring and amphibian habitat mapping (see page 2), grassland bird monitoring, and forest soil monitoring!

June, July, August 2015	Amphibian Monitoring	Amphibian Habitat Mapping	Eastern Hemlock Inventory	Forest Birds	Forest Vegetation & Soils	Grassland Birds	Water (quarterly)	Water (continuous)
Antietam National Battlefield		X	X	X	X	X	X	
Catoctin Mountain Park	X		X	X	X		X	X
Chesapeake & Ohio Canal NHP	X		X	X	X			
George Washington Memorial Parkway			X	X	X		X	
Harpers Ferry NHP	X		X	X	X		X	
Manassas National Battlefield Park	X		X	X	X	X	X	X
Monocacy National Battlefield	X		X	X	X	X	X	
National Capital Parks - East			X	X	X		X	
Prince William Forest Park		X	X	X	X		X	X
Rock Creek Park	X		X	X	X		X	X
Wolf Trap NP for the Performing Arts		X	X	X	X		X	X

Who's the Crew?

Amphibian Monitoring and **Amphibian Habitat Mapping** conducted by collaborators from the USGS Patuxent Wildlife Research Center, lead by Andrew Deitrich.

Eastern Hemlock Inventory conducted by NCRN crew, lead by Liz Matthews.

Forest Bird and **Grassland Bird Monitoring** conducted by collaborators from University of Delaware, lead by Conor Higgins.

Forest Vegetation and **Forest Soil Monitoring** conducted by NCRN I&M crew, lead by Liz Matthews.

Water (quarterly) and **Water (continuous) Monitoring** conducted by NCRN I&M water crew hydrologists Margie Shaffer and Tonya Watts.



Bird crew leader
Conor Higgins

Getting the Dirt on Forest Plots...

This summer, the NCRN forest vegetation crew will have a special 2-person unit (Adam Lee and Daniel Colopietro) dedicated to monitoring forest soil. Of the 431 NCRN forest plots in the region, NCRN has already gathered soil data at 297 and hopes to complete monitoring at the remaining 134 plots by the end of 2016.

This soil data has the potential to offer up a much higher resolution picture of soil



Forest soil monitoring.

Photo: NPS/Paradis

classification than is currently available from USDA data and could reveal where the region's most unique soils are, and which are the most common. Soils data could also help explain patterns in vegetation data and other biological phenomenon.

To learn more about NCRN I&M forest vegetation monitoring, visit http://science.nature.nps.gov/im/units/ncrn/monitoring_veg.cfm.

Park Acronyms

ANTI = Antietam National Battlefield
CATO = Catoctin Mountain Park
CHOH = Chesapeake & Ohio Canal National Historical Park
GWMP = George Washington Memorial Parkway
HAFE = Harpers Ferry National Historical Park

MANA = Manassas National Battlefield Park
MONO = Monocacy National Battlefield
NACE = National Capital Parks - East
NAMA = National Mall and Memorial Parks
PRWI = Prince William Forest Park
ROCR = Rock Creek Park
WOTR = Wolf Trap National Park for the Performing Arts

Invasive Plant Alerts and IPM Pest Briefs

Trying to keep track of the latest invasive plant or forest pest? Luckily, folks at the NCR Office of Natural Resources and Science (ONRS) have been busy and two series of fact sheets are now available!

Mark Frey and the NCR Exotic Plant Management Team (EPMT) have been busy creating Invasive Plant Alerts! There are 20 new alerts for 2015 that describe plant species that in most cases are not present in the region in large numbers, but have the potential to be. The alerts cover the following species: fountaingrass, Brazilian waterweed, common water hyacinth, giant knotweed, mudmats, common St. John's-wort, yellow archangel, large-flower primrose-willow, parrot feather water-milfoil, Eurasian water-milfoil, brittle water nymph, heavenly bamboo, yellow floating heart, Amur corktree, trifoliolate orange, common buckthorn, glossy buckthorn, Japanese spiraea, smallflower tamarisk, and black swallowwort. All are available on the EPMT sharepoint page at: <http://goo.gl/28sQQB>. Invasive Plant Alerts for previous years are

also available online in the same spot.

Another series of fact sheets was created by NCR Integrated Pest Management (IPM) Coordinator Jil Swearingen. The "IPM Pest Briefs" cover insect, disease, and plant threats to natural areas and structures. So far briefs have covered: winter aconite, thousand cankers disease, spotted lanternfly, bushkiller, Japanese cedar longhorn beetle, chestnut blight, swallowworts, European paper wasp, Japanese knotweed, boxwood blight, Asian longhorned beetle, and most recently, cankerworms. All are available in the IPM Pest Brief folder on the IPM sharepoint page at: <http://goo.gl/q0mL7s>.



An Invasive Plant Alert about heavenly bamboo (*Nandina domestica*) from the NCR EPMT program.

Calendar

JUNE

11. **Invasive Plant Management Training**, sponsored by the NCR Exotic Plant Management Team. Re-certification credits from DC, MD, VA, WV, and PA available. To be held at WOTR. Contact Mark Frey by NPS email or at 202-339-8317.

JULY

16. **Natural Resources Advisory Team (NAT) Meeting**. Rock Creek.

AUGUST

18. **NCR IPM Training: Integrated Pest Management for Concessions**. 9 am - 3 pm. NCR Headquarters- Classroom B. For details contact Jil Swearingen at NPS email or 202-339-8318.

SEPTEMBER

1. **NCR IPM Training: Protecting Natural and Cultural Resources**. 10 am - 3 pm. MONO Historic Preservation Training Center. Contact Jil Swearingen at NPS email or 202-339-8318.

15. **NCR IPM Training: Forest Health Protection**. 10 am - 3 pm. MONO Historic Preservation Training Center. Contact Jil Swearingen at NPS email or 202-339-8318.

OCTOBER

15. **Natural Resources Advisory Team (NAT) Meeting**. WOTR.

2016 NPS's Centennial Year!

APRIL

21. **Spotlight on National Park Resources Biennial Meeting**. NCTC.

Visit NCRN I&M online at:

Website: <http://science.nature.nps.gov/im/units/ncrn>
 Facebook: <http://www.facebook.com/NPSNCRN>
 Twitter: <https://twitter.com/NPSNCRN>

NCRN Natural Resource Quarterly offers updates on the status of park natural resources and Inventory and Monitoring (I&M) "vital signs" for the NPS National Capital Region Network (NCRN).

Questions or comments? Contact Megan Nortrup by NPS email or at 202-339-8314

National Capital Region Network Inventory & Monitoring (NCRN I&M) Staff:

- Program Manager: Patrick Campbell
- Botanist: Liz Matthews
- Data Manager: Geoff Sanders
- GIS Specialist: Leslie Frattaroli
- Hydrologic Technician: Tonya Watts
- Hydrologic Technician: Margie Shaffer
- Quantitative Ecologist: John Paul Schmit
- Science Communicator: Megan Nortrup