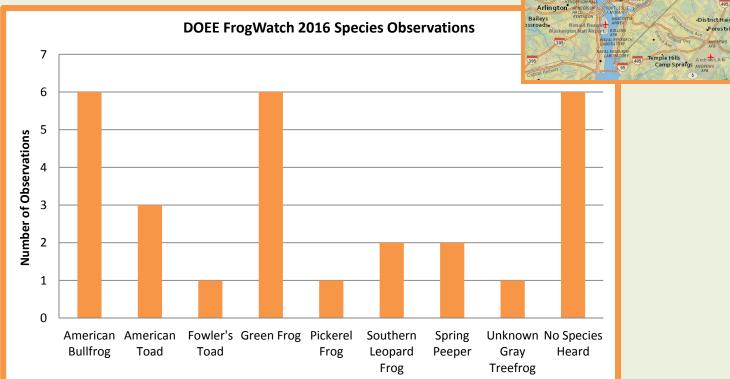
# **DOEE FrogWatch 2016 Season Summary**

#### Introduction

The Department of Energy & Environment (DOEE) launched a local chapter of the national FrogWatch USA™ citizen science program in 2016. The chapter, hosted through the Aquatic Resources Education Center (AREC), trains volunteers to recognize frogs and toads by call and to help collect data from wetland and stream locations throughout the District. This report highlights some of the results from the first year of DOEE FrogWatch. Thank you to all who attended training, collected and submitted data, and expressed interest in the program. DOEE FrogWatch is not possible without you!

## DOEE FrogWatch at a Glance

- 3 in-person training workshops held in March and April
- 26 participating volunteers
- 15 registered sites in the District (12), Maryland (2), and Virginia (1)
- 21 monitoring visits from April through August
- 8 species heard



Continue to the next pages for additional details on 2016 monitoring in Northwest and Northeast/Southeast.

## FrogWatch USA National Program Updates

2016 was the 18th year of the nationwide program. Although these data are provisional and may be subject to change, this year there were:

- 894 monitored sites
- 616 newly registered sites
- 6,839 observation visits, boosting the national database to more than 58,000 total from 1999-2016
- 89 species and subspecies observed

For more national updates, visit:

- AZA FrogWatch USA Homepage: <a href="https://www.aza.org/frogwatch">www.aza.org/frogwatch</a>
- Newsletters and Social Media: www.aza.org/frogwatch-social-media-and-newsletters



#### Northwest: Forest Hill/Broad Branch Stream Restoration Monitoring

From February - October 2014, the Department of Energy & Environment, Department of Transportation, the District of Columbia Water and Sewer Authority and the National Park Service collaborated to improve water quality and wildlife habitat availability for Broad Branch and Rock Creek. One restoration measure implemented was a Regenerative Stormwater Conveyance (RSC) that created a series of step pools to mimic the natural processes (hydrology) of a small stream and associated wetlands. DOEE FrogWatch volunteers established a monitoring site in 2016 and collected data on calling frogs and toads from April through June.



2016 DOEE FrogWatch monitoring sites.



BBRS1 is located at two step pools/ regenerative stormwater conveyances. This photo shows the monitoring location during the day when it was first registered in April 2016.

American Bulfrog (Lithobates catesbianus) and American Toad (Anaxyrus americanus) were the two most frequently heard species at the Broad Branch Regenerative Stormwater Conveyance 1 (BBRSC1) DOEE FrogWatch site.



Monitoring site BBRS1 located to the west of Linnean Avenue NW and upstream of the National Park Service property buffering Broad Branch was established in April 2016 and visited 6 times to collect data on calling frogs and toads.

## 2016 Broad Branch Amphibian Monitoring Results

## Species documented from DOEE FrogWatch monitoring:

- American Toad
- American Bullfrog
- Green Frog
- Gray Treefrog Species Complex
- Pickerel Frog

#### Other species observed:

Spring Peeper

Future monitoring will help document the seasonal timing of species breeding activity at this location and additional sites can help create a more complete picture of how the stream is used by local amphibians, thereby ultimately documenting one success of restoration efforts.





#### Northeast/Southeast: Kingman & Heritage Islands Park

Kingman and Heritage Islands are man-made areas created in the early 1900s from material dredged from the Anacostia River. Kingman Island, the larger of the two, is bordered on the east by the Anacostia River and on the west by Kingman Lake. Heritage Island sits within Kingman Lake. The park is owned by the District of Columbia Government and managed by Living Classrooms of the National Capital Region; the two collaborated to establish long-term FrogWatch monitoring locations for monthly data collection.



2016 DOEE FrogWatch monitoring sites.



An aerial view of Heritage Marsh and Heritage Island. The circular patches are marsh recovery parts where the Anacostia Watershed Society propagates native wetland plants. Frogs and toads use marsh habitat for breeding and as a nursery for eggs and tadpoles.





Three monitoring sites were established along the Heritage Island Trail and monitored in April, June, and July for calling frogs and toads.

# 2016 Heritage Island Monitoring Results

Species documented from DOEE FrogWatch monitoring:

- Fowler's Toad
- Green Frog
- Southern Leopard Frog

#### Other species observed:

- American Toad
- Spring Peeper



The Southern Leopard Frog (Lithobates sphenocephalus) was the most frequently heard species in Heritage Marsh during 2016 monitoring by DOEE FrogWatch volunteers. Listen to a recording from one such observation here:

http://wamu.org/news/16/05/09/when\_dc\_frogs\_call\_for\_mates\_these\_human\_volunteers\_respond

A view of HITM1, the northernmost site closest to the Heritage Island trailhead, just prior to the July 2016 monitoring visit. The nationwide standardized protocol requires that monitoring visits are conducted 30 minutes after sunset to document the peak breeding and calling activity of frogs and toads in the United States. Southern Leopard Frog was heard during April at this site; other species were heard farther down the trail at HITM2 (middle site) and HITM3 (southernmost site).

### Looking Forward: Plans for the 2017 Season

There are many exciting opportunities in the works, including:

- Additional monitoring locations established on Heritage and Kingman Islands so that volunteers can split up during monthly group monitoring visits.
- National Park Service (NPS) collaboration to register additional monitoring locations along Broad Branch to compare habitat differences and seasonal variation.
- Exploring habitat availability and permitting in other NPS-owned parcels.
- Documenting amphibian communities at other stream restoration projects in partnership with DOEE's Watershed Protection Division, Planning and Restoration Branch.
- Continued resources and support for volunteers establishing their own monitoring sites.
- Spreading the word about the program!

Presently, one review session for current volunteers and a separate session for new recruits are being planned for February or March 2017. Attending a review session is optional for returning volunteers, but training is required for new individuals. You can stay up to date through the DOEE FrogWatch Mailing List and by visiting <a href="https://www.doee.dc.gov/service/frogwatch">www.doee.dc.gov/service/frogwatch</a>.

### Three Tips for Preparing for Next Season

Prepare for spring's arrival and the start of DOEE FrogWatch on February 1st!

- 1. Begin scouting potential monitoring sites and coordinating with landowners early. Wetland sites can be easily seen as snow melts. Email <a href="mailto:doee.arec@dc.gov">doee.arec@dc.gov</a> if you have a wetland or stream area in mind but are unsure of property ownership.
- 2. Practice recognizing your frog and toad calls and review your volunteer packet materials. Check out the DOEE FrogWatch Monitoring Resources at <a href="mailto:doee.dc.gov/service/frogwatch">doee.dc.gov/service/frogwatch</a>.
- 3. Frog and toad breeding tends to begin following the first warm and heavy rain of the year when evening temperatures reach 45 degrees. Be ready for the big night!

#### Citizen Scientists Unite!

Eager for more citizen science? Two great projects to add to your list include:

- Uploading photos to iNaturalist. iNaturalist is an easy-to-use mobile app and computer platform that
  brings together a community of amateur and professional naturalists to document biodiversity locally,
  nationally, and globally. It is also an easy way to document visual observations of frogs and toads
  separate from your DOEE FrogWatch monitoring. Get started at <a href="www.inaturalist.org">www.inaturalist.org</a>.
- **Submitting your small mammal observations**. DOEE is monitoring the population of eastern cottontail rabbits and eastern chipmunks in the District. Document your sightings on our <u>online form</u>.

Learn more at doee.dc.gov/service/citizen-science-initiatives.

### **Keep in Touch**

Need help? Want to share an interesting observation? Email <u>doee.arec@dc.gov</u> to reach one of the DOEE FrogWatch Coordinators or email Rachel Gauza Gronert, DOEE Fish & Wildlife Biologist, directly at rachel.gauza@dc.gov.

# Amphibians need our assistance. Offer a helping hand by lending an ear!

