WILDLIFE ON THE DUKE FOREST

Who lives here anyway?

Plus many more important insects!!!
GOAL:
Promote a diverse population of animals native to the Piedmont of North Carolina

APPROACH:

Objective 1 – Do No Harm:
- Promote landscape and stand level habitat diversity
- Minimize and mitigate negative impacts caused by timber management, recreational use, and other activities

Objective 2 - Wildlife Monitoring & Baseline Establishment:
- Develop a research program that uses citizen science, class projects, theses, etc. to better understand current wildlife diversity and distribution

Objective 3 - Using Management Interventions to Promote Wildlife:
- Use research program outputs to direct targeted management interventions that specifically promote particular species, taxa, and/or guilds
Duke Forest’s First Ever Program!

Herpetofauna (Amphibians & Reptiles) of the Duke Forest
Science Advisor: Dr. Nicki Cagle

Purpose: To collect data that increases understanding of the herps in Duke Forest so we can better protect them.

- Launched program in August 2018.
- Ran through October 2018.
- Trained 22 citizen scientists.
- Monitored 6 transects each week across different habitats in the Durham Division.
- Run again March – October 2019
<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Toad (Bufo americanus)</td>
<td>2</td>
</tr>
<tr>
<td>Copperhead (Agkistrodon contortrix)</td>
<td>1</td>
</tr>
<tr>
<td>Eastern Garter Snake (Thamnophis sirtalis)</td>
<td>1</td>
</tr>
<tr>
<td>Ground Skink (Scincella lateralis)</td>
<td>5</td>
</tr>
<tr>
<td>Rat Snake (Elaphe obsoleta)</td>
<td>4</td>
</tr>
<tr>
<td>Ringneck Snake (Diadophis punctatus)</td>
<td>1</td>
</tr>
<tr>
<td>Salamander (Unidentified)</td>
<td>2</td>
</tr>
<tr>
<td>Skink (unidentified)</td>
<td>2</td>
</tr>
<tr>
<td>Smooth Earth Snake (Virginia valeriae)</td>
<td>1</td>
</tr>
<tr>
<td>Snake (Unidentified)</td>
<td>1</td>
</tr>
<tr>
<td>Southern Two-lined Salamander (Eurycea cirrigera)</td>
<td>2</td>
</tr>
<tr>
<td>Spotted Salamander (Ambystoma maculatum)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**HERPETOFAUNA CITIZEN SCIENCE RESULTS**
North Carolina Butterfly Monitoring Project

Jeff Pippen runs a transect in the Durham Division of the Duke Forest. All of the data is contributed to a national database of butterfly survey data called the PollardBase and to the Natural Heritage database.

May 2018 – October 2018

# Butterfly species encountered: 46
# Butterfly individuals tallied: 2,136

New species for Durham County & Duke Forest!
Steve Hall has been conducting surveys of Lepidoptera (moths & butterflies) and Orthoptera (grasshoppers, crickets, and related) in the Blackwood Division of the Duke Forest since 2015. Information on Lepidoptera entered onto the Moths of North Carolina website.

Rare Moth Found: *Lytrosis permagnaria*
TREE PHENOLOGY: CITIZEN SCIENCE

Our newest citizen science project

Science Advisor: Rebecca Dalton, Ph.D. Candidate

Purpose: To identify and record data about the timing of spring flowering and leaf-out of Duke Forest trees.

- These data will contribute to the National Phenology Network’s tracking of how biological events may be shifting because of climate change.
- It will also help us better understand the localized impacts to the Forest.
- Launching February 2019
Clarence Korstian Award 2018

Tom Griffin