

WORKBOOK



Black Creek
BIOBLITZ

The Pee Dee Land Trust would like
to thank you for taking the time
to participate in the Black Creek
Bioblitz!

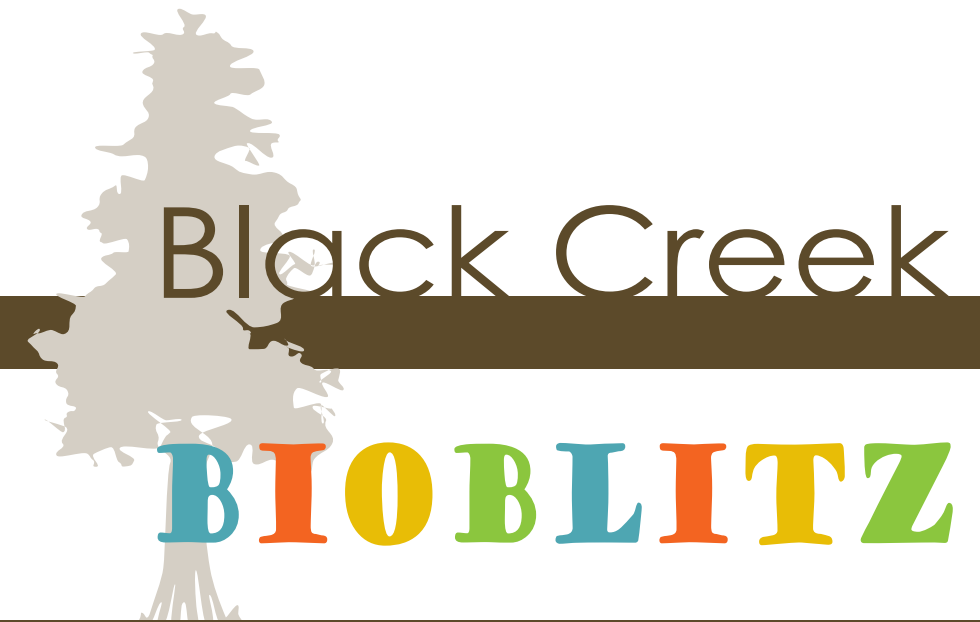
NAME: _____

DATE: _____

WEATHER: _____

GROUP: _____

Contact Information:
843.667.3229 | www.peedeelandtrust.org



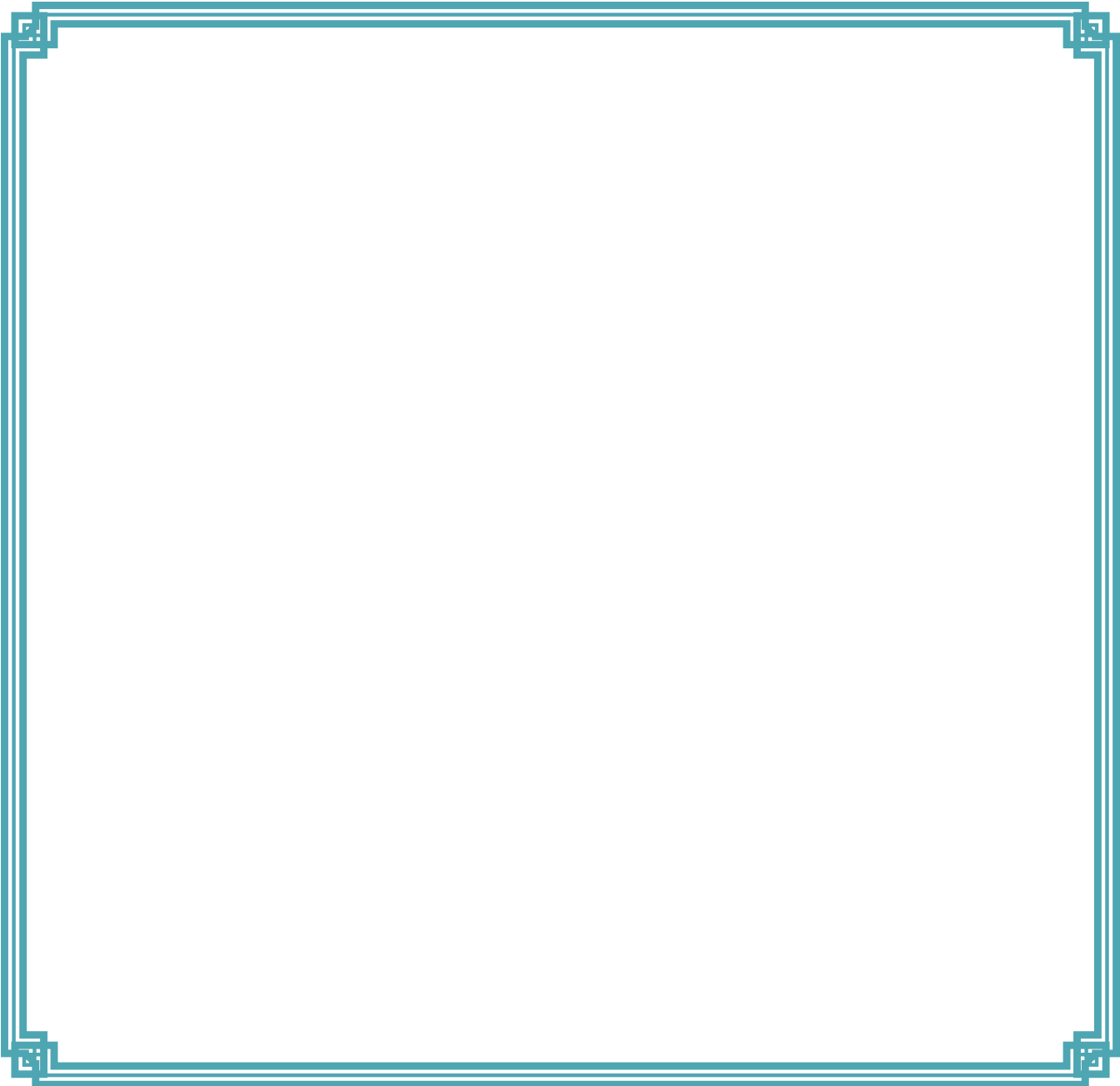
@ Dargan Preserve an Ambassador Landscape of the Pee Dee Land Trust

Special thanks to Wells Fargo Foundation and Duke Energy Foundation
for supporting the Black Creek BioBlitz Project.

DO YOU LIKE TO EXPLORE?

When you walk outside, there is a whole world filled with birds, insects, trees, plants and other types of organisms that contribute to the ecosystem surrounding you. These organisms and their environment make up our life support system. For example, pollinating insects pollinate flowers which in turn produce things such as fruits, vegetables, and even fibers used to make clothing. All organisms contribute to the ecosystem in some way and to maintain our life support system, we need to protect them. In order to do so, we need your help!

Citizen Scientists are people like teachers, parents, and even you, who conduct scientific research with or without a professional scientist to help the greater good. Today, you get to become a citizen scientist by helping our team collect data on the biodiversity found at the Dargan Nature Preserve through the Black Creek BioBlitz!



**DRAW A
PICTURE OF
YOUR BIOBLITZ
EXPERIENCE!
YOU MIGHT WANT
TO DRAW YOUR
FAVORITE FIND
OR ANYTHING
YOU FOUND
BEAUTIFUL IN
NATURE TODAY!**



WHAT IS A BIOBLITZ?

A BioBlitz is a large survey of a designated area to find as many living species as possible in a designated amount of time. Anyone can participate in a BioBlitz, including scientists, students, teachers and other community members! BioBlitz programs are a wonderful way to surround yourself with nature and raise awareness of the biodiversity around you.

While a BioBlitz is typically done over a 24 hour period, you will participate in a mini BioBlitz where you and other groups will conduct surveys on different days in 1-2 hour segments. Eventually, the individual data collected will be combined from all groups to complete the Black Creek BioBlitz program.

HOW CAN YOU HELP?

In addition to boosting your interest in nature and conservation through your involvement in the BioBlitz project, this information will allow us to better understand the ecosystem found in the Oak-Pine Forest and more generally, the coastal plain ecoregion. In time, we can compare data collected at the site and see how biodiversity changes due to seasonal changes or even changes in climate and pollution. Additionally, this data will help conservationists and policy makers better understand how we, as professionals and citizen scientists, can help reduce our footprint on ecosystems and organisms within them to help maintain our life support systems.



BEFORE WE START, PLEASE MAKE NOTE OF THE FOLLOWING:

- The plot number and GPS location needs to be documented on ALL of the data sheets
- Have someone take a photograph of your findings.
- Make sure you have the proper field guides to help you identify each organism.
- Once you think you have properly identified the organism, find your leader or expert naturalist to help verify your identification.



Take a few moments to reflect on your time at the preserve. List 5 words that describe your experience.

1. _____
2. _____
3. _____
4. _____
5. _____



Write a paragraph detailing your experience and how you can help keep the world natural.





Currently, the Dargan Nature Preserve has no known invasive species. Invasive species are organisms which are not native to a particular ecosystem and whose presence is harmful or may be harmful.

Describe what may happen if an invasive species (such as a plant or animal) is introduced to the property.



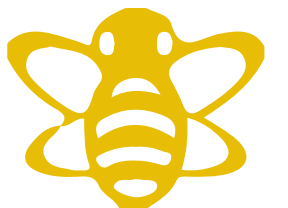
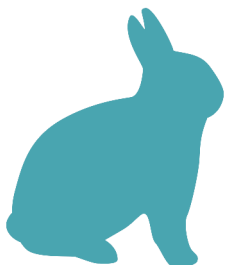
Finally, natural disasters such as tornadoes, floods, and fires can cause major disturbances in ecosystems which can influence the biodiversity among them.

How do you think an event, such as the recent flooding in South Carolina and past tornado events, helps reshape the ecosystem?

A FEW REMINDERS FOR THE ORGANISMAL GROUPS:

- Amphibians: Frogs, salamanders, etc.
- Birds: Woodpeckers, vultures, etc.
- Fish: Striped bass, common darters, etc.
- Invertebrates: Dragonflies, butterflies, spiders, etc.
- Mammals: Beavers, raccoons, deer, etc.
- Reptiles: Snakes, turtles, lizards, etc.
- Fungi: Mushrooms, yeast, molds, etc.
- Plants: Woody or herbaceous

**Please refer to the proper field guide when identifying organisms. Leaders and naturalists are here to help and are essential to properly identifying species.*





DATA COLLECTION

| ITEM | Plot # | Total # Found | Common Name | Order/Family |
|------|--------|---------------|-------------|--------------|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |

DARGAN NATURE PRESERVE
ECOSYSTEM REVIEW:

Circle the abiotic factors and underline the biotic factors in the list below.

Light Trees Salinity Temperature pH
Fungi Precipitation Moss Soil Birds

List 2 abiotic (non-living) factors which affect growth of trees and shrubs in the Oak-Pine Forest.

List 2 biotic (living) factors which affect the growth of trees and shrubs in the Oak-Pine Forest.



**DARGAN NATURE PRESERVE
ORGANISMS
REVIEW:**



Document and describe one organism that you observed which was found at the property.



If you had to choose one, circle your favorite group from the list below.



- Mammals**
- Fungi**
- Amphibians**
- Fishes**
- Invertebrates**
- Reptiles**
- Plants**
- Birds**



What characteristics separate your favorite group from other groups listed?

| Genus/species | Characteristics | Verified (Name of Expert) | GPS Location |
|---------------|-----------------|------------------------------|-----------------|
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DATA COLLECTION

| ITEM | Plot # | Total # Found | Common Name | Order/Family |
|------|--------|---------------|-------------|--------------|
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |

[illegible]