



Newsletter



Volume 10, Issue 11

Carvers Creek State Park

November 1, 2022

2022 Year of the Tree:

Bark Beetles and Longleaf Pine



Longleaf pine affected by *Ips* beetle

In last month's newsletter, while talking about the sassafras tree, we also talked about succession in plant communities. Imagine looking at an area of a forest that has had all the trees cut down. Only scrub and small plants would remain, surrounded by bare soil and tree stumps. But if you waited a few weeks, and the temperature and weather were right, you would see different young plants shooting up. Wait even longer and it will change even more, as the plants will begin competing for sunlight and other resources. The change over time in plant and animal life is succession.

Although succession is an ongoing natural process, sometimes we can identify specific events that jumpstart visible succession. Sometimes it's large, man-made events, like clear cutting for timber or the prescribed fires necessary to maintain healthy longleaf pine systems. But it can also be a result of a natural process like a disease or insect infestation that results in changes in the habitat. Succession can occur on a smaller scale, also. Something as simple as a tree falling in the forest will open up the canopy, allowing more sunlight to reach the ground and encouraging different plants to grow in the newly open area. Small scale succession is happening all the time.

Here at Carvers Creek, small succession events happen as part of the natural cycles in the various types of plant communities in the park. We also routinely conduct prescribed burns to protect the longleaf pine life-cycle. Sometimes, unusual events trigger changes in the plant and animal communities within the park. For instance, right now in the park you can see the indicators of a small infestation of bark beetles in some of the longleaf pine trees along the edge of East Manchester Road, near the Long Valley Farm entrance.

Bark Beetles and Carvers Creek

This summer was a particularly hot and dry season in North Carolina. Water levels in the small ponds at the park dropped significantly, and the average daily temperature in July was about 2 degrees warmer than last year. In addition, East Manchester Road is one of the busiest roads that borders the park, exposing the trees along the road to greater vehicle exhaust. Drought, high heat and high pollution place extra stress on trees like the longleaf pine, and that stress makes them more susceptible to damage from insects and diseases. This year, that resulted in sev-

In this issue:

Bark Beetles and Longleaf Pine 1

This Month's Activities: 2

Community Outreach

Orienteering

Fire, How Primitive can you go?

CACR Walking Group

Birdwatch in the Sandhills

Nature Journaling

Migration

History Hike



eral longleaf pine trees becoming host to an outbreak of a species of bark beetle known as a pine engraver beetle, or *Ips* Beetle (so-called after the beetle's scientific classification in the *Ips* genus).

Ips beetles typically breed and live in fallen trees and small trees left over from logging operations, and play an important role in processing the dead and dying trees. However, when conditions are right, such as periods of tree stress resulting from the drought and high heat, they can infest apparently healthy trees. The *Ips*

life cycle begins when the male beetle bores an entrance hole through the outer bark, and creates a small chamber inside. Female beetles then use the chamber as a starting point for cutting out a series of galleries that are used for egg laying.

We first suspected we had a outbreak of beetle activity because several of the trees along East Manchester road were showing signs of stress. Brown or yellowing pine needles and dying branches in the upper part of the tree were indicators something was wrong. The Park Superintendent and scientists from the Division of Parks and Recreation (NC-DPR) met to examine some of the trees and found the remains of galleries like the picture above, and multiple entrance holes bored through the outer bark which led them to conclude it is an *Ips* beetle infestation.

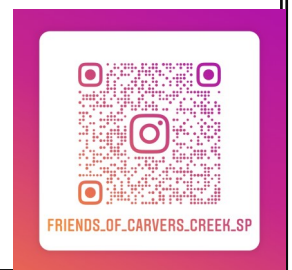
How are we addressing the bark beetles?

Bark beetles are a native species and not invasive, and it's important to let the natural cycle of life continue with minimal interference. And because the outbreak is small and contained, with a large strip of ground without host trees between the affected trees and other areas in the park, we do not expect this outbreak to spread. Park staff are currently monitoring the condition of the trees. Most of the trees will probably recover, and any trees that die off will start the natural succession process we talked about at the beginning of this article. We are also experiencing a cooler than normal October, which may help reduce the activity of the bark beetles and limit the damage they can do.

Keep up with the park at our official webpage: <https://www.ncparks.gov/state-parks/carvers-creek-state-park>

Follow us on Facebook at Friends of Carvers Creek: <https://www.facebook.com/FriendsofCarversCreekSP/>

Follow us on Instagram at Friends of Carvers Creek or point your smartphone camera at the QR code to the right.



Remember: Park Hours change in November! Both access points (Long Valley Farm and Sandhills) will be **open at 8am and close at 6pm daily**. Trails, the park office and bathrooms are open during those times. Visitors are not allowed in the park outside of those hours.

Just a reminder: Fishing is permitted in the park with a current NC fishing license. Hunting is not permitted in the park.

Dogs must be kept on an attended leash at all times.

If you would like to attend one of our upcoming programs please call 910-436-4681 to reserve your spots.

Community Outreach

The following program are sponsored by Carvers Creek State Park. *They will not be held at the park but rather, in different places within the community.*

Thursday, Nov. 3rd @ 3:30 pm

Orienteering

Saturday, Nov. 5th @ 1:00pm

Do you like navigating through a forest with a compass and map--or have never done so but would like to try? If so, join a Park Ranger and learn about pacing, compass reading, using a map to navigate to various points, and more around the Rockefeller House. Please wear hiking shoes, pants, and long sleeves for this event. You must sign up for this free event by calling the park office. We will plan to hike approximately 2-3 miles. **Meet in front of the Welcome Center for this event.**

CACR Walking Group

Friday, Nov. 18th @ 8:30 AM

Friday, Nov. 25th @ 8:30 AM

Get some exercise while enjoying fresh air and spend a morning in the park, when you join us for a 1-3 mile walk on park trails. Go at your own pace or stay with the group. All ages and abilities welcome (parents/guardians must accompany children under 15). Meet outside the Welcome Center. Bug spray, water and boots, walking or running shoes recommended. No registration required.

Nature Journaling

Saturday, Nov. 19th @ 1:00pm

Come to the park to learn to make a nature journal ! The Park Superintendent will lead a class on how to make the journals . After we finish, we will take a short hike to write in our journals. This class is suitable for all ages and families are welcome! Please call the park at (910) 436-4681 to reserve your space. This class is limited to 10 people. Due to the nature of the activity, this class may be rescheduled if there is inclement weather.

Gobbles and Wobbles at **Spring Lake Library**

Fire, How Primitive Can You Go?

Sunday, Nov. 13th @ 3:00pm

Meet up at the Secret Pond and test your fire making skills. After learning to use a ferrous rod, you can try making a one match fire, flint and steel, or really challenge yourself with a friction fire. See if the fire triangle will work in your favor or against you. All ages are welcome.

Birdwatch in the Sandhills

Saturday, Nov 19th @ 10:00 am

Join a park naturalist at our Sandhills access for an easy bird watching walk around the Wiregrass loop trail. An easy 1.4 mile loop that starts and ends at the parking lot, the Wiregrass loop trail is a great place to find some of the birds that live year round in our longleaf pine habitat, and maybe even see some of the less frequent visitors that are just passing through. We'll start early to help keep things cool, but bring weather appropriate clothes and some water! We will be using the Merlin Bird ID app (free and available in both Android and IOS app stores). If you have binoculars, be sure to bring them! The hike will start at 10:00 AM, and meet at the trail head near the small parking lot. The event and access to the park are both free of charge. Please call our office at 910-436-4681 to sign-up!

Migration

Sunday, Nov. 20th @ 2:00pm

Join us to learn about migration. It is a risky journey for any animal involved. Come out and learn more about the creatures that make the trip and the dangers they encounter along the way.

History Hike

Saturday, Nov. 26th @ 1:00pm

Join us as we will be walking and exploring the millpond, silos, pavilion, and other historical farm buildings not yet open to the public. There is no need to sign up to this event. Bring a bottle of water, a camera (if you like taking pictures), and your walking shoes! Please meet in front of the park office for this event.