





Volume 10, Issue 12

Carvers Creek State Park

2022 Year of the Tree:

Red Mulberry Trees and the Food Web

As the year winds to a close, it becomes harder to make positive identification of the various trees found throughout the park. Flowers and leaves make identification easier and this time of year most of the flowers have bloomed and the leaves have fallen. However, some of the trees still have identifiable characteristics that allow us to figure them out. One of the easiest that you can still identify is the Red Mulberry tree.

The Red Mulberry is a native tree, part of a family of trees that are found worldwide. Mulberry trees are critical parts of the *local food web*, and produce a knobby dark reddish black fruit that is eaten by birds, opossums, raccoons, and other animals. This time of year, the mulberry leaves turn a deep yellow-golden color, sometimes dotted with brown or rusty red. Younger Mulberry tree leaves typically have multiple shapes, including a single lobed oval leaf, a mitten shaped leaf with two or three lobes and sometimes a multi-lobed leaf. More mature trees may only have single lobed leaves, like the one to the right.

Within the park, mulberry trees can be found near some of the old buildings and along the trail sides. Look for their yellow-golden leaves before they fall!

The Local Food Web

One of the terms used above was "local food web". A food web is a way of describing the relationships between plants and animals as they exist in our world. For example, a mulberry tree might produce fruits which are eaten by a cardinal. The cardinal might fly to another location and drop the seeds from the fruit, which later grow into more mulberry trees. The same tree might harbor insects like leaf hoppers and lace wings on its leaves, providing food for local chickadees or maybe even birds passing through on their annual migration. Those birds will make nests and lay eggs and sometimes the eggs will be eaten by other predators such as snakes and raccoons. The birds, the predators and the mulberry itself may help provide nutrients back to the soil to help other species grow and thrive. In this example, the mulberry is the beginning of the food web, and part of the systems that support many other animals and plants.

What do you think would happen if that mulberry tree was killed or replaced by another



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Large Mulberry leaf gathered in early Fall.

species, maybe one that isn't native to the area? Probably not too much if it was just a single tree, but imagine acres of trees cut down or killed off by an invasive species. That part of the food web would suddenly be gone, and the whole structure it supports could collapse. Although there are other sources of food, the other plants and animals in the food web may not be as well adapted to them as they were to the original plan. The fruits may not be as nourishing or ripen at the proper time to support nesting birds with young. The new seeds might have a differently shaped shell that makes it difficult for some birds to open them. The trees may support different types of insects not normally eaten by the birds. There are many possible ways for the system to change.

Why are invasive species a problem?

When a new species is introduced to an area, it may not have the normal predators or limitations in the environment that help keep it under control in its native habitat. It may force out native species and cause disruptions to the food web that continue to grow as the new species becomes dominant. It's one of the reasons that the Park Rangers at Carvers Creek spend a lot of time monitoring and controlling the different invasive species that make their way into the park. Although it may not be obvious to us when we are enjoying the trails and picnic areas, the Rangers have been working hard to pull up, cut down, and control invasives like Chinese wisteria, rattlebox, Japanese stilt grass, Bradford pears and many, many others.



Living the Wild Life!

Since this is the last newsletter of the year, I would like to end it by giving you some ideas on how you can promote natural native diversity and support the food web in your own backyard. You could build a few birdhouses and place them in safe areas near food and a water source. That would attract birds who would spread native seeds and provide plenty of entertainment for an aspiring bird watcher. You could plant native species like the red mulberry or some of the other trees we've talked about in this newsletter. One fun and easy way is to simply stop mowing and let the native grasses and plants take over! Now, you might get a few weird looks if you stopped mowing your entire vard!

But if you can find a small space that you can let grow wild, maybe a five or ten foot square plot, you will be amazed at what you can find growing there after a few seasons. It would be even better near a fence or around water. The water and fence will attract birds and animals that will help spread seeds, but don't worry if you don't have something like that. Any space that you let grow wild will show results.

Interested in learning more? Some resources are listed below:

Books: Douglas Tallamy, *Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard.*

Website: National Wildlife Federation, Garden for Wildlife: https://www.nwf.org/garden

Podcast (about invasive species from Stuff You Should Know podcast): <u>https://www.iheart.com/</u> podcast/105-stuff-you-should-know-26940277/

How to build a simple one-board birdhouse: https://www.birdsandblooms.com/backyard-projects/ diy-birdhouse/build-one-board-diy-birdhouse/

Native Plants and Trees of NC: https://ncwildflower.org/recommended-native-species/

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

Birdwatching in the Park

Saturday, Dec. 10th @ 10:00 am (Long Valley Farm) Saturday, Dec. 17th @ 10:00 am (Sandhills Access)

Join a park naturalist at our Sandhills access for a 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 For Sandhills accessmeet at the trail head near the small parking lot. For Long Valley Farm- meet in front of the Welcome Center. The event and access to the park are both free of charge. Please call our office at 910-436-4681 to sign-up!

First Day Hikes

Sunday, January 1st, 2023 at 11:00 am

A long standing tradition of the NC State Parks are the First Day Hikes. Start the year off right and come join us for a variety of hikes throughout the park on January 1st 2023! Call (910) 436-4681 or register below to sign up!

First Day History Hike (Long Valley Farm): Join us for a 3 mile walk around the Long Valley Farm park area to learn more of the history of the park, going back to when it was a working farm and part of the Rockefeller estate. We will view some of the old farm and estate buildings and learn about the people that lived here and how the farm functioned. The hike will begin at I I am. Please meet in the field next to the Park Welcome Center.

Sense Hike (Long Valley Farm): Join our Park Superintendent on a 1 mile hike designed to introduce children (and kids of all ages!) to nature and experiencing the wonders of the natural world. Please meet at the picnic area in the parking lot at 11 am.

Nature Hike (Sandhills Access): Meet at the Sandhills Access on McCloskey Street for a 2 mile hike to explore the sights and sounds of the Sandhills Access.We'll wander through the longleaf pines and learn about the different types of plants and animals in the area and see what kind of animal tracks and signs we can find. Meet at I Iam at the Sandhills Access by the small parking lot.