

Boardwalk Guide—September 2013

Pardon Our Dust! This boardwalk guide is under construction. Rangers are designing a new brochure. In the meantime, please use this temporary guide as you enjoy the 2.4 mile boardwalk. Look for the numbers along the way. The boardwalk is a flat, accessible trail into the floodplain forest. Enjoy your walk and place this guide in the wood box when you return.

- 1 This American beech tree, identified by its smooth gray bark, is likely over 100 years old; this species was an important source of food in the floodplain for American Indians and early settlers. Beech nuts were collected and ground into flour for bread and meal cakes.
- 2 As you look at the ground on either side of the boardwalk, you will notice a damp, dark-colored mud, which is a mixture of clay and old leaves. This mud, called Dorovan muck, is eight feet thick and plays an important role in the health of the floodplain. It filters water, traps pollution, and turns pollutants into harmless compounds. By filtering water, it helps keep the floodplain and the Congaree River clean.
- 3 The majestic bald cypress trees produce “knees” that rise up from the roots of the tree and can be seen throughout the forest floor. While their function is not entirely understood, it is believed that the knees provide the tree with extra structural support during floods and high winds. Bald cypress trees can live to be over 1,000 years old.

Bald cypress wood is both rot and water resistant. The wood is often called “wood eternal” because it decays slowly and may remain in perfect condition after 100 years of use. Historically, the Catawba and Congaree tribes used bald cypress wood because it was easy to work with and durable. Many bald cypress trees were logged in the late 1800s and used in roof shingles, docks, bridges, cabinetry and more, which is why so few old-growth bald cypress trees exist today.
- 4 Water tupelos dominate the landscape here, and are identified by their swollen trunks. These trees only grow where water is plentiful. You may notice moss on the lower part of the tree trunk; this is an indicator of the water level from previous floods. Flooding is a natural occurrence in Congaree National Park and is important for bringing fresh nutrients into the floodplain.
- 5 Due to a slight increase in elevation of only a few inches, switch cane now dominates the forest floor. Although it looks similar to bamboo, an invasive plant in South Carolina, it is more closely related to sugar cane. A dense growth of switch cane is called a canebrake. Canebrakes were so prevalent in South Carolina during early European settlement that the phrase was historically used on maps to describe vast areas of switch cane.
- 6 Standing dead trees are called snags. The tree may be dead, but snags are full of life. Many species of insects, spiders and fungi make their home in and on the dead wood. At the base of this snag you will see the work of a pileated woodpecker. The woodpecker breaks off woodchip-sized pieces to reach the insects living inside.
- 7 An old-growth forest is home to trees in all phases of life and death, from seedlings to champion trees to rotten logs. Few plants can grow in the diminished sunlight of the forest floor. This allows you to observe an open view far into the forest. Big trees, both alive and dead, play an important role in the animal life of the floodplain, providing food and shelter for an abundance of species. The value of these trees was recognized by members of the local community in the mid-1900s. The threat of logging motivated groups to advocate for the protection of Congaree, leading to its inclusion into the National Park System in 1976.
- 8 The impressive height of Congaree’s forest is the result of the rich soil, frequent flooding, a long growing season and a history free of intensive logging. Here the trees you see average over 130 feet in height making Congaree one of the tallest deciduous forests in the world. The forest is rich in biodiversity, meaning it supports an abundance of many different kinds of living organisms.
- 9 The low area you see on both sides of the boardwalk is called a gut. Guts and sloughs (pronounced “slew”) are low channels in the forest that help disperse water throughout the floodplain when the Congaree River floods. The guts will fill with water prior to the entire forest floor flooding. During floods, silt and soil are deposited, replenishing the floodplain with nutrients.
- 10 This fallen loblolly pine may have lived for two centuries before Hurricane Hugo knocked it down in 1989. Cut to clear the trail, an inspection of the rings in the trunk reveals stories of forest fires, droughts, and years of abundant rainfall.
- 11 The grand and beautiful tree you see here is a loblolly pine. It is unusual to find pines growing in wetland areas; however, loblollies can handle living in wet conditions better than many other species of pines. Loblolly pines are the tallest trees in South Carolina. This individual is over 150 feet tall and is a former state champion.

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12 Once a bend in the Congaree River, Weston Lake is now an oxbow lake. Over 2,000 years ago the river changed its course and meandered south, leaving behind Weston Lake. The lake is slowly filling in with clay and organic debris. Freshwater turtles such as the yellow-bellied slider and common snapping turtle are often spotted here in the warmer months of the year. It is important to remember that all plants and animals in the park are protected. You can help protect wildlife by not handling, disturbing or feeding them.

13 The powerful force of lightning has left its mark on this tree. As they grow, loblolly pines emerge above the canopy. Loblollies are the tallest trees in the forest, which makes them easy targets for lightning strikes. What appears to be damage is actually an opportunity for beetles, termites and fungi to thrive.

14 South Carolina is known as the Palmetto State. It is named after the state tree, the cabbage palmetto. The short, fan like palms on both sides of the boardwalk are dwarf palmettos, close relatives of the cabbage palmetto. They are one of the hardiest palms due to their ability to withstand freezing temperatures. Dwarf palmettos thrive best in wet, sandy areas where a disturbance, like a hurricane, causes a gap in the canopy, allowing sunlight to reach the forest floor.

15 The 18th Amendment was passed in 1919, prohibiting the sale and consumption of alcohol in the United States. Moonshiners and bootleggers found refuge in places like the Congaree River floodplain to earn a living. The iron box you see in the distance is an old still, used to make alcohol. Water and corn squeezings were used to make a sour mash. The mash was heated and distilled through copper tubing to produce moonshine. The Congaree floodplain's difficult terrain and tall trees made it a perfect hiding place for moonshiners to hide stills and produce their illegal liquor.

16 On September 21, 1989, Hurricane Hugo left its mark in this part of the forest. Accompanying tornados likely touched down here, leaving large open gaps in the canopy. Many large and medium-sized trees did not survive, but seedlings and vines sprouted thereafter due to the abundant sunlight reaching the forest floor. Disturbances like these play an active part in forest renewal.

17 Fire has been a natural and active occurrence in this forest. Today, the National Park Service manages the forest through prescribed fires to return the natural fire regime, to lessen the fuel load on the ground, and to provide habitat for the endangered red-cockaded woodpecker and many other plant and animal species. Loblolly pines are tolerant of fire and are normally left unscathed when fire severity is low to moderate. This fallen loblolly pine continued to burn after a prescribed fire due to a naturally caused injury at the base of the trunk. After the tree fell, resource managers sectioned the tree to ensure the fire was fully extinguished.

18 As a reporter and editor for The State newspaper, Harry Hampton began a campaign in the 1950's to save the Congaree River floodplain. As an avid outdoorsman and hunter, Hampton, along with other conservationists, spent time exploring the old-growth forest. The spirit of exploration and love for the outdoors had long attracted people to the floodplain. The Sims Trail you are crossing is a former road, used to access a hunting lodge near Wise Lake. Roads historically used by hunters, fishermen and loggers are scattered throughout the park. The roads serve as a reminder of the long human history and use of the land. Many people, including Hampton, had a strong connection to the forest and deemed it worthy enough to fight for. Their efforts eventually led to the establishment of Congaree Swamp National Monument in 1976 (re-designated Congaree National Park in 2003).

19 Just a few miles from here, where the Congaree and Wateree Rivers meet, a maroon settlement once existed. These settlements were comprised of individuals who escaped slavery and formed their own independent communities. Rivers provided a means for travel, finding food and acquiring supplies from local plantations. Dense vegetation in the floodplain forest, like the twisted roots seen here, provided safety because of the difficulty it posed for slave owners and slave catchers attempting to traverse it in pursuit of those who had escaped.

20 This forest existed long before it was protected as a national park. The natural sounds you hear today are the same sounds heard by the Congaree and Catawba tribes that came here long ago. Take a moment to listen to the forest. You may be surprised by what you hear. The forest comes alive with the sounds of songbirds, frogs, and the wind blowing through the trees. What would this forest look and sound like if it had not been protected?