

Chesapeake Paddler



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A Paddler's Favorite Flora and Fauna on the Pocomoke

By Paul Fofonoff



Paddling the Pocomoke in the Fall
photograph by Paul Fofonoff

I first saw the Pocomoke River in 1997, and I've paddled it at least four times, with the Appalachian Mountain Club, the Anne Arundel Bird Club, and the Chesapeake Paddlers Association (CPA), mostly on the section between Snow Hill and Porter's Crossing, and on Nassawango Creek. I still have a lot of the river to explore, and I recommend Ralph Heimlich's 2010 'Sea Kayaker' article for a fuller description and paddling details (<http://seakayaker.us/paddling-the-pocomoke-and-nassawango/>). But I'm a biologist (mostly marine), and an amateur naturalist above the water's surface, so I'll write about a tree and a few creatures.

The Pocomoke is remarkable, as the East Coast's "northernmost Southern river," with the northernmost extensive tidal Bald Cypress swamp. Two biologists, George Beaven and Henry Oosting, surveyed its flora in the 1930s, and listed more than 200 species of plants. The Pocomoke is missing alligators and Spanish Moss, but you can see ferns and flowers growing on trees, deer and snakes swimming, and float with the tide deep into a forest. I can't list all the creatures you can see on this river, and I'll just try to sketch a few of my favorites.

Bald Cypress (*Taxodium distichum*)—A tree with knees

As trees go, Bald Cypress is a strange tree. It's a conifer, but not an evergreen—the needles turn rusty and drop off in the fall. This tree can grow in up to 1.2 meters (4 ft) of water, but it will also grow in a lawn or a yard in comparatively dry soil. The seeds won't germinate under water, but will survive submerged for 2 ½ years, and then will germinate on exposed mud or moss. A record tree in Williamsburg, Virginia, is 44 m (144 ft) tall, but these trees more usually reach 25 m (82 ft). A single tree is monoecious (has both sexes) produces both pollen and seeds, and produces hard, green, spherical cones. The Pocomoke swamp was logged many times, so its trees

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Anacostia Water Trail Map and Guide

by Ralph Heimlich, CPA Coordinator

For several years, our Annual Meeting Paddle took place on the Anacostia River, launching from Bladensburg Waterfront Park.

The Anacostia Watershed Society, a nonprofit organization dedicated to cleaning the water, recovering the shoreline, and honoring the heritage of the Anacostia River and its watershed communities just released the Anacostia Water Trail Map and Guide, now available through their website. The Trail Map and Guide, created in partnership with the National Park Service, brings together all of the resources and activities available on the Anacostia River and guides users through access points and features of the trail.



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Kayaking the Anacostia River, CPA's 2012 Annual Meeting photograph by Ralph Heimlich

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are mostly less than 100 years old, but some in the south have been dated to 1700 years ago. Further north, there's an isolated grove at Battle Creek on the Patuxent, and planted trees survive as far north as Pittsburgh and Ottawa.

But for me, the most unique features are the knees, tall wooden cones and spikes that rise from the long horizontal roots, out of the mud and water. In some places, they look like a mass gathering of cowed monks, or Saturday Night Live's old Cone-heads. Each knee is a little different, like an abstraction of a human figure. But what are they for? One idea is that they help the roots breathe, pumping oxygen down into the anoxic mud. But there's no evidence for that. I talked to Pat Megonigal, a Smithsonian biogeochemist, who has been doing some experiments in a small grove of planted trees, near where I work. I thought maybe the weight of the knees might stabilize the tree, in the mud, but Pat pointed out the weight of the knees is trivial compared to the weight of the tree. At the edge of a swamp, the knees are all on the wet, muddy side, where they'd tip the tree over, if they weighed a lot, which they don't. The knees don't grow in dry soil, and they grow taller in deeper water, but nobody knows what they're for.

Red-Bellied Cooter Turtle (*Pseudemys rubriventris*)



Red-Bellied Cooter Turtle
photograph by Patrick Wamsley

In the Pocomoke and other tidal fresh rivers around the Chesapeake, the Red-Bellied Cooter and the Eastern Painted Turtle

(*Chrysemys picta*) are the turtles kayakers most commonly see, because they are common, and bask in the sun. Other common turtles, like the Snapping, Mud, and Stinkpot turtles, and the Diamondback Terrapin come out of the water, mostly to lay their eggs. The red-belly is our largest basking turtle, with a shell 10-12 inches long. They're usually shy, but on some well-travelled rivers, they'll let kayakers get close enough to admire their colors and take pictures. It ranges throughout the lower Chesapeake watershed south to the Gulf, but there's a tiny, isolated colony in ponds near Plymouth, Massachusetts, a relic of a brief warm phase after the Ice Age.

Wood Duck (*Aix sponsa*)

This beautiful duck is found throughout the Chesapeake's wooded fresh and brackish

tributaries, but the Pocomoke is ideal habitat, with lots of sheltered fresh waters, and trees for nesting. But humans tend to take out the big trees that attract woodpeckers that make the nesting holes that the Wood Duck needs. Even worse, in the late 19th and early 20th century, this bird was massacred for its feathers, used to decorate ladies' hats. Wood Ducks have been rescued by a long ban on hunting (now permitted), and by the placing of numerous nesting boxes—sometimes wood, sometimes plastic—on poles, and usually with an inverted cone below to block predators. The male bird is more colorful, but the female is equally elegant, in brown and olive. The birds are wary, and without binoculars, you'll know them by their fast take-off and their call, which Roger Peterson describes as "a distressed woo-eek." They are one of a few ducks that breed here in the summer, so you can see them year-round.

The episode which I'd love to see in real life (BBC's "Planet Earth" shows it for the related Mandarin Duck) is how the ducklings leave their nesting hole, permanently, because they can't fly yet. The nesting hole can sometimes be 50-60 ft. up in a tree, and momma, on the ground or in the water calls the babies till they make the leap. Small animals can stand big drops, because of air resistance, and because the impact of an object increases with weight. So the ducks gather their courage, jump, hit the ground, shake themselves, and waddle to the water, following momma.

Prothonotary Warbler (*Protonotaria citrea*)



Prothonotary Warbler
photograph from Smithsonian
National Zoo, Migratory Bird Center

This brilliant golden-yellow and olive bird draws birders to the Pocomoke in spring. The name comes from a group of Vatican officials who wore bright yellow robes, in order to distinguish themselves from the cardinals. The Prothonotary Warbler likes southern hardwood and cypress swamps, and, like the Wood Duck, nests in tree-holes made by woodpeckers. It forages for insects and snails in low vegetation near water, and calls "sweet, sweet, sweet." It's easy to spot it from the water—we saw many on an Anne Arundel Bird Club paddle in May.

One could add many more plants and critters to this story, but I hope these few will draw more paddlers to the Pocomoke, and encourage them to stop, look, and listen, and cherish and protect the Chesapeake's swamps and marshes.

Paul Fofonoff, a CPA member since 2002, kayaks with the Pier 7 Pirates. He is a Biological Science Technician at the Smithsonian Environmental Research Center in Anne Arundel County, Md. Paul earned a Ph.D. in Oceanography from the University of Rhode Island, a M.S. in Zoology, and a B.A. from Clark University.



Cypress Tree along the Pocomoke River
photograph by Paul Fofonoff



Wood Duck
photograph by Patrick Wamsley