

Dueling Bills at Mason Neck

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Chesapeake Conservancy/National Park Service (NPS)

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Figure 1: Great blue heron nests at the Elizabeth Hartwell Mason Neck National Wildlife Refuge

When someone mentions Mason Neck, the first thing I think of are great blue herons. Found year-round throughout the Chesapeake Bay region, this majestic and beautiful bird is the largest heron in North America, standing four to five feet tall and having a six-to-seven-foot wingspan. Unlike ospreys, eagles, and hawks, gregarious birds such as herons build their nests in colonies called rookeries. The [Elizabeth Hartwell Mason Neck National Wildlife Refuge](#) is home to one of the largest great blue heron rookeries on the Potomac River, numbering well over 500 active nests. Whenever I visit, I look for shadows in the tree canopy and wild clattering, both telltale signs of a heron rookery, also called a heronry.

Mason Neck is a peninsula in Virginia, just south of Washington, D.C. and bordered by Belmont Bay, the Potomac River, Gunston Cove, and Pohick Bay. The southwestern portion is comprised of [Mason Neck State Park](#) and the Elizabeth Hartwell Mason Neck National Wildlife Refuge, which seamlessly flow together to form over 4000 acres of woodlands and wetlands. Most of the refuge is off limits to the public so when I want to see the rookery, I launch my kayak from the [cartop boat launch](#) at the state park and then paddle 2.7 miles south along the shore to the Potomac River as I scan the trees in the refuge for great blue herons.

Early spring is good for seeing the nests before the trees become thick with foliage. During this time, great blue herons will typically lay two to seven pale blue eggs which incubate for 25-29 days before hatching. Later in the spring, it will be harder to spot the nests from afar but you might be able to find them by listening for the distinct [chatter of juveniles](#), which I have heard as late as early summer.

My first rookery encounter at the refuge was in April 2015, when it was the largest in the mid-Atlantic region at over 1,400 nests. Why has it shrunk since then? I don't know for certain, but I've been watching various rookeries over several years and have noticed that they are not static. Much of this movement is natural, resulting from the death of nesting trees due to so many birds living in close proximity and producing massive amounts of excrement.

I saw numerous great blue heron nests while kayaking at the refuge that day, but what I didn't expect to find were great egrets also nesting in the rookery. Egrets and herons living together? Well, yes and no. Egrets are really just a type of heron. The great egret (formerly called the great white heron) and the great blue heron are of the genus [Ardea](#) and therefore closely related to each other, as are the snowy egret and the little blue heron, which are of the genus [Egretta](#). They are all members of the family [Ardeidae](#), which is synonymous with herons.



*Figure 2: Great egrets nesting in a great blue heron rookery*

In late-March 2018, I paddled back to the refuge which had shifted further south. I was disappointed that I didn't see as many nests as my previous visit, but I did get to witness a courtship dance in which, with the feathers along their necks extended, they engaged in bill duels. That was quite a sight!



*Figure 3: Great blue heron courtship dance*



*Figure 4: Great blue herons at the rookery*

My most recent visit was in early-April 2022. This time, I did not find any heron nests. I suspect the rookery moved to another part of the refuge not visible from my kayak.

While I didn't see any heron nests that day, I did spot four bald eagle nests along with eight bald eagles, including one juvenile.



*Figure 5: Bald eagle nest*



*Figure 6: Bald eagle*

Had Elizabeth Hartwell seen what I did that day, I'm sure she would have been pleased. Nicknamed "The Eagle Lady," Hartwell's efforts resulted in the first national wildlife refuge created specifically for the protection of bald eagles. This refuge was established in 1969, at a time when bald eagles were on the brink of extinction. Three years later, the Environmental Protection Agency (EPA) banned Dichlorodiphenyltrichloroethane (DDT), an insecticide used in agriculture which caused many birds, including bald eagles, to lay thin-shelled eggs that broke during incubation. As the bald eagle population increased, the Eagle Lady was recognized in 2006 by Congress renaming the refuge in her honor. The following year, the population recovered to the point it was removed from the Endangered Species list. Victory!

I saw various other critters while kayaking, including mystery snails, a large (up to three inches long), non-native, freshwater snail from Asia. Their name comes from the fact that unlike most freshwater snails, mystery snails give birth to live young...very mysterious.



*Figure 7: Mystery snail*

I found one mystery snail on the shore using its [operculum](#) as a trapdoor to seal itself inside its shell, protect its vulnerable soft parts, and resist drying out, or desiccation.





*Figure 8: Mystery snail using its operculum to seal itself inside its shell*

The wind picked up in the latter half of my trip, making for some challenging paddling through high waves that churned up something I'd never seen before. I took some pictures and sent them to the Maryland Department of Natural Resources. A biologist responded and told me I had found some species of *Lyngbya*, a type of benthic cyanobacteria that can be rolled into ball shapes through movement by tides and wind. Unfortunately, some *Lyngbya* species can be potentially harmful to humans, pets, and livestock. At the time of this writing, samples have been sent to universities and the EPA for testing.



Figure 9: Lyngbya

After paddling, I met Ranger Tammy on the [Bay View Trail](#) for the Mason Neck State Park’s family-friendly “Out of the Blue” great blue heron event. Our group did a short trail walk to a beaver dam. Along the way, we witnessed a great blue heron stealthily wading through the wetlands in search of food. Ranger Tammy brought along a feather that we could touch, told us about their lifecycle, and answered any questions we could think of.



*Figure 10: Great blue heron feather*



*Figure 11: Great blue heron searching for food during the "Out of the Blue" event*

The great blue heron rookery at the Elizabeth Hartwell Mason Neck National Wildlife Refuge may be much smaller than it was once, but that doesn't worry me. Overall, the species' numbers have remained relatively stable as they have adapted well to living near humans. These regal birds have been found throughout the entire United States, and with over half the East Coast's great blue heron population residing in the Chesapeake Bay region, they are a common sight at places like Mason Neck. I'll keep paddling near the refuge, and I suspect it is just a matter of time before the rookery and I cross paths again.

For more information see

[Chesapeake Bay Program – Great Blue Heron](#)

[Loudoun Wildlife Conservancy – The Great Blue Heron](#)

[U.S. Fish & Wildlife Service - Elizabeth Hartwell Mason Neck National Wildlife Refuge](#)

[Prince William Conservation Alliance – Great Blue Heron](#)

[Factors Determining Great Blue Heron Rookery Movement](#)

[National Wildlife Federation – Is This a Heron, Egret or Crane?](#)

[Environmental Defense Fund - 25 Years After DDT Ban, Bald Eagles, Osprey Numbers Soar](#)

[Department of Conservation and Recreation, Virginia – Mystery Snails](#)

[Wikipedia - Lyngbya](#)

[Heron Conservation](#)