

# NAGS HEAD WOODS

*2022-2023 Annual Report*

*TOWN OF KILL DEVIL HILLS*

*SEPTEMBER 2023*

The Nature  
Conservancy   
North Carolina

## Staff



Pictured from left: Lora Eddy, Conservation and Resilience Specialist, Aaron McCall, Northeast Regional Steward; Eric Soderholm, Albemarle-Pamlico Restoration Specialist.

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# 1.0 VISITOR SERVICES

Visitor services, especially through the summer months, continue to be an important component of Nags Head Woods Preserve management. Our outdoor informational kiosk houses the visitor’s registration log along with maps, guides, and other literature. Indoor visitor reception is generally available most weekdays during normal business hours. Restrooms, drinking fountain and water bottle refill services, air conditioning, a few comfortable chairs and opportunity to interact with staff are often appreciated by hikers during the hot months.

## 1.1 Office

Our offices have been back open since May 2022. But some days during the regular work week, you may not see us due to a reduced staff who are still working flexible, hybrid work schedules and juggling field work. We strive to have both the Nags Head Woods (Preserve) administrative office and indoor visitor facilities open for visitors during the regular work week, especially during the summer months when visitor numbers are high.

## 1.2 Staff

Starting in September 2022, Lora Eddy who has worked in our office for the past 6-years transitioned into filling Jennifer Gilbreath’s role in the office.

The Albemarle-Pamlico Sounds Director position remains unfilled. Staff is covering the gaps to keep our work at Nags Head Woods Preserve and our work across the Albemarle Pamlico Sounds planning area moving forward.

In the fall of 2022, we hosted Sophie Nichols a student volunteer from East Carolina University’s Coastal Studies Institute Outer Banks Field Site Program. Sophie helped with stewardship around the Preserve such as trail maintenance and invasive species removal.

In June 2023, we welcomed temporary staff, Grace Daughtrey as our Preserve Assistant to help with our seasonal influx of visitors. Grace primarily focused on stewardship activities on the trails and office as well as providing services to our visitor. Additionally, she worked on a project to



summarize concepts and ideas for a redesigned visitor experience in the Pavilion, stay tuned as we explore this refresh of our Pavilion space.

### 1.3 Preserve Visitation – Trail Counters

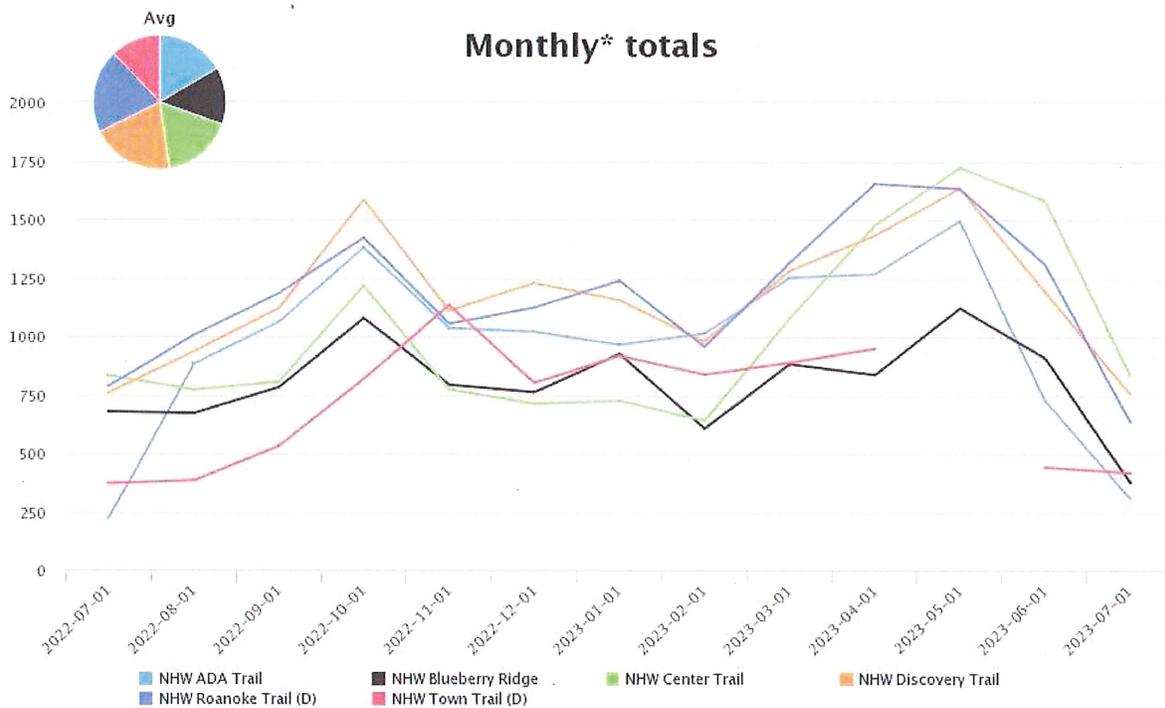
We continue to monitor the six infrared trail counters which were installed in Nags Head Woods Preserve in January 2021. This data is helping us understand the use of the woods for both trail and road traffic.

This year we are reporting on a full year’s worth of data, from July 1, 2022, to July 1, 2023.

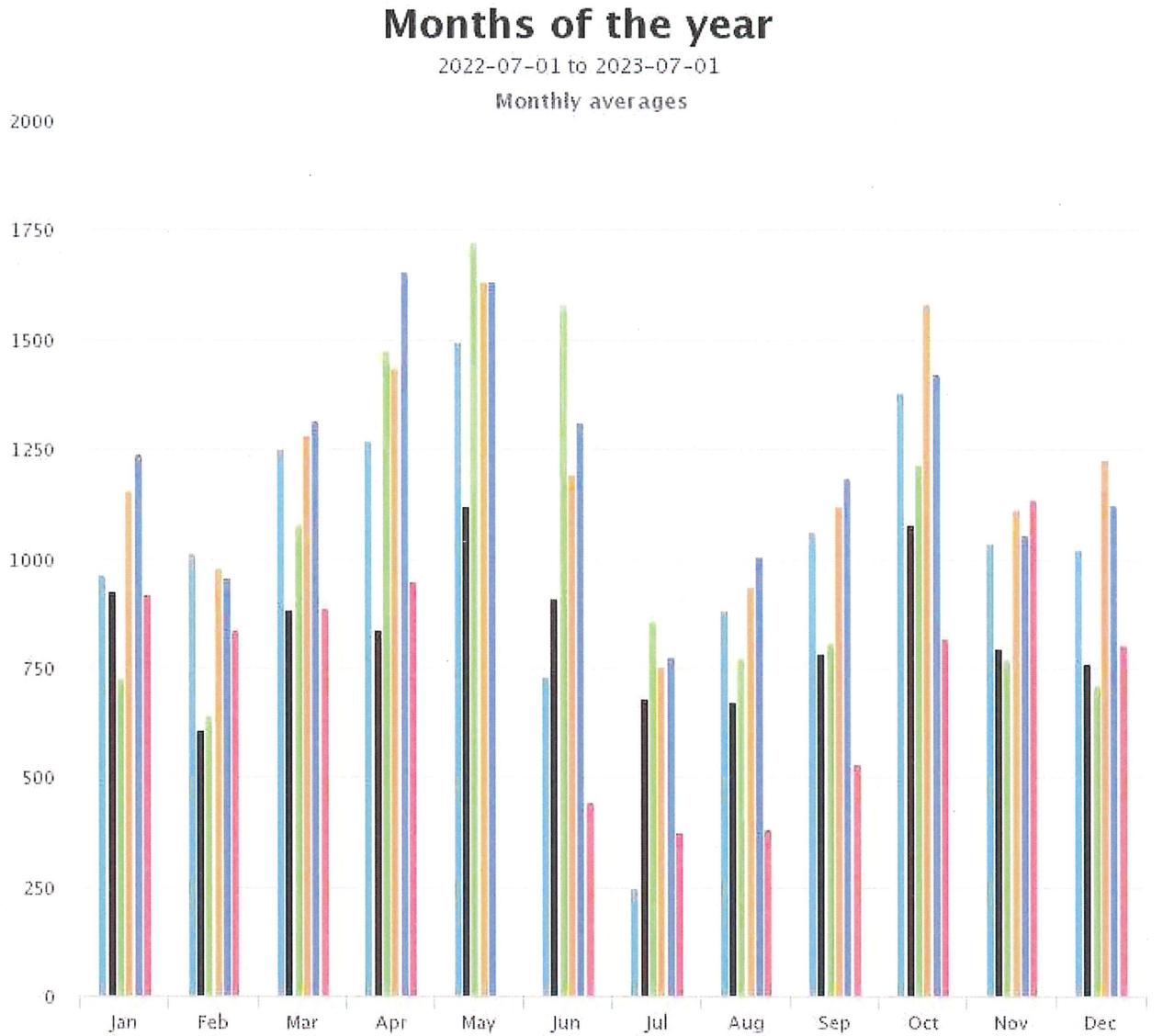
The counters are reporting 20 – 50 hikers per day or between 700 – 1,200 hikers per month on each of the trails. Our most popular trails are the Discovery, Roanoke, and Center trails.



Graph 1. All Trail Counters by Month Line Graph



Graph 2. All Trail Counters by Month Bar Graph

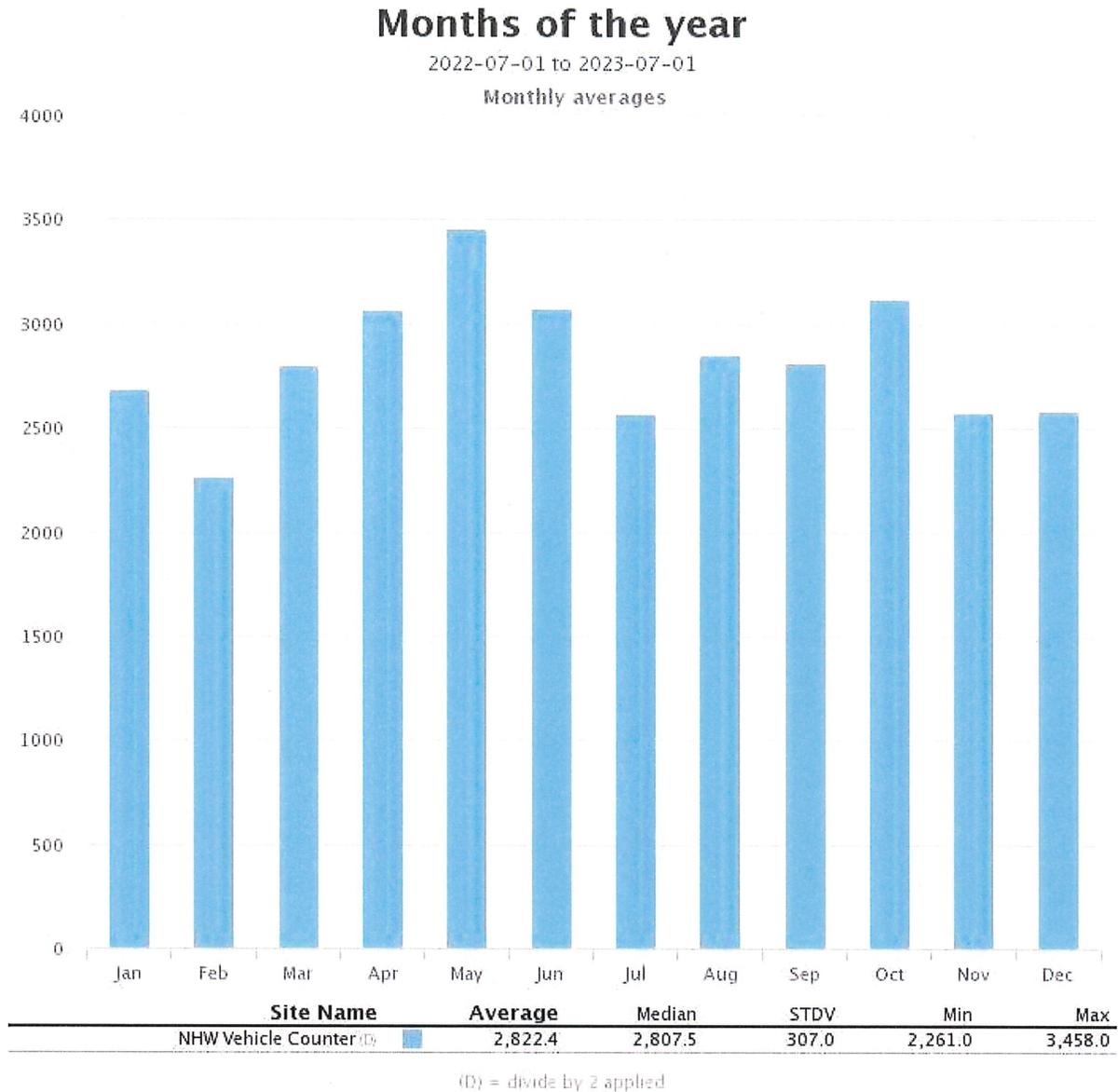


Site Name	Average	Median	STDV	Min	Max
NHW ADA Trail	1,029.4	1,028.5	312.8	248.0	1,495.0
NHW Blueberry Ridge	838.0	815.5	149.7	608.0	1,122.0
NHW Center Trail	1,030.4	831.2	362.8	641.0	1,723.0
NHW Discovery Trail	1,200.8	1,174.0	247.2	752.7	1,634.0
NHW Roanoke Trail (D)	1,223.2	1,212.0	252.7	776.9	1,654.0
NHW Town Trail (D)	734.6	818.0	245.8	373.9	1,134.0

(D) = divide by 2 applied

We have also installed a roadside vehicle counter, and with 12 months' worth of data for this reporting period, we are seeing just an average of 2,800 vehicles per month on Ocean Acres and Old Nags Head Wood Road.

Graph 3. Ocean Acres Vehicle Counter by Month



## 1.4 Audio Tour

Since its debut in the summer of 2019, our audio tour has been well received with a cumulative number of 3,314 calls and 1,137 unique callers.

## 1.5 Facilities and Trails

This spring with assistance from App State we replaced 100 feet of wood decking on our ADA trail and conducted much needed general trail maintenance.

We are working towards addressing sections of our wooden boardwalk along the Discovery Trail as well as addressing some much-needed bridge repairs on the Center Trail.

In 2022 TNC surveyed the 842 preserves open to the public and Nags Head Woods is in the top 10 of the most visited TNC preserves.

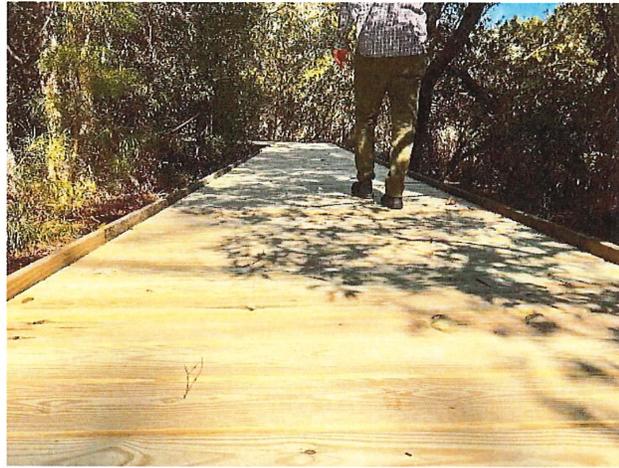


Photo Credit: Lora Eddy/TNC

## 2.0 Partnerships, Volunteers, Community

April 2023 in partnership with the NC Aquarium, we hosted First Flight Elementary School and Nags Head Elementary's 5th grade classes at the Preserve for the Sea2Sound (S2S) event. A total of 135 students were a part of this program, which is a full day, hands-on science field trip that starts at the Atlantic Ocean and traverses the width of OBX, mostly on the Town Trail in Nags Head.

Additionally for the past 3 years Rhana Paris, NC Aquarium Outreach Coordinator, has given a "Maritime Forest Ecosystem" virtual program at Nags Head Woods.

This year there were fifty-four 5<sup>th</sup> graders from Sherwood ES in Gaston County and 3 teachers who participated.



Image 2. NC Aquarium Program

In March 2023, we hosted eleven students from Appalachian State University at Nags Head Woods during their alternative spring break. With their assistance we replaced approximately 100 feet of wood decking on our ADA trail, conducted much needed general trail maintenance, and constructed a 100-foot loose shell oyster reef behind Pea Island National Wildlife Refuge in partnership with the refuge and NCCF oyster shell recycling program.



*Image 3. App State Students*

## 3.0 Conservation, Management, Biology

### 3.1 Invasive Species

We continue to manage invasive plants within Nags Head Woods. This is hard work and a constant effort during the warmer months. The ecology of Nags Head Woods would be critically impacted without continued management and control of these invasive plants.

Thank you for doing your part in encouraging residents to not plant these species as many are commonly sold at smaller local and large landscaping stores. A good resource to check is the Invasive Plant Atlas of the United States: <https://www.invasiveplantatlas.org/>

See table below for detailed management and control practices:

Invasive	Management & Source
<p>NEW Bush Clover – lespedeza</p>  <p><a href="#">This Photo</a> by Katja Schulz is licensed under <a href="#">CC BY</a></p>	<ul style="list-style-type: none"> <li>• <b>MANAGEMENT:</b> Controlled by hand cutting and herbicide</li> <li>• <b>SOURCE:</b> It comes in with the gravel for the roadways therefore very difficult to manage. It can form massive strips along the roadway with knee high long stems and small pea-like white flowers and seeds/spreads quickly.</li> </ul>
<p>Russian Olive</p>  <p><a href="#">This Photo</a> by Unknown Author is licensed under <a href="#">CC BY</a></p>	<ul style="list-style-type: none"> <li>• <b>MANAGEMENT:</b> Controlled by hand cutting and herbicide</li> <li>• <b>SOURCE:</b> Russian Olive is a popular ornamental sold extensively at local stores. Its seeds are brought in by birds, unknowing hikers, and vehicles.</li> </ul>
<p>Oriental Bittersweet</p>  <p>Image via UGA Bugwood Center for Invasives</p>	<ul style="list-style-type: none"> <li>• <b>MANAGEMENT:</b> controlled by hand cutting and herbicide</li> <li>• <b>SOURCE:</b> Once a popular ornamental and brought in by birds. It can form massive swaths of heavy cover in trees quickly.</li> </ul>

Invasive	Management & Source
<p>Japanese Stilt Grass</p>  <p>Image via UGA Bugwood Center for Invasives</p>	<ul style="list-style-type: none"> <li>• MANAGEMENT: controlled by herbicide</li> <li>• SOURCE: It comes in with the gravel for the roadways therefore very difficult to manage. It can form massive swaths of ground cover vegetation quickly.</li> </ul>
<p>English Ivy</p>  <p>Image via Flickr by James St. John</p>	<ul style="list-style-type: none"> <li>• MANAGEMENT: controlled by hand cutting and herbicide</li> <li>• SOURCE: English Ivy also a popular ornamental for ground cover. brought in by birds, hikers and vehicles. Some English Ivy may have been planted by members of the Nags Head Woods community in the 18th and 19th century and by the company that had planned to develop the Woods in the 1970's.</li> </ul>

## 3.2 Deer Management

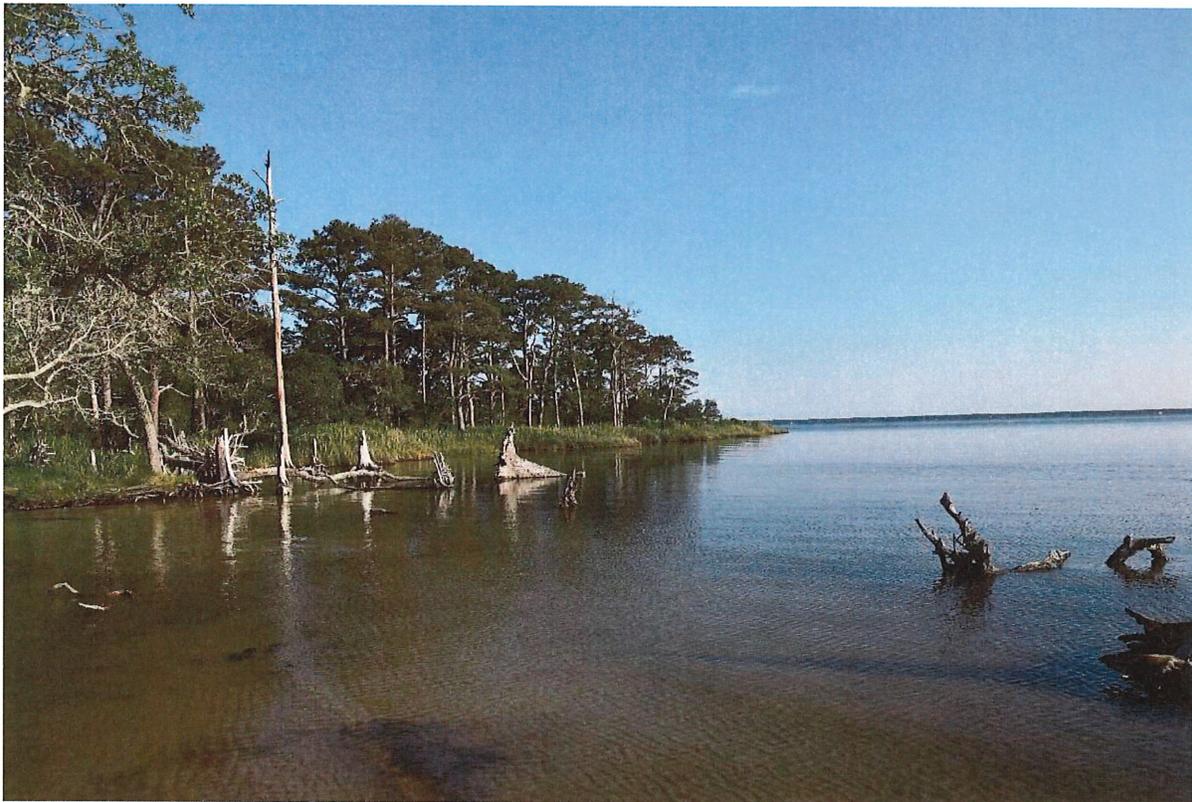
Since 1995 we have coordinated with the North Carolina Wildlife Resources Commission to manage the Nags Head Woods deer population through a registered bow hunt. The bow hunt helps manage the deer population to alleviate nutritional stress and lessen the probability of further declines in herd health.

The bow hunt offers affordable, important heritage and consumptive recreation for local citizens who hunt. Many hunters provide important feedback about the Preserve. This year approximately 300 hours were reported in the year-end hunt survey.

The regular bow hunt season ran from September 10, 2022, to January 2, 2023, with an extended Urban Archery season which closed February 19, 2023. A total of 34 hunters registered for the 2022-2023 season, with a total of 8 deer harvested.

Hunter's requirements:

- A current North Carolina hunt permit,
- Attend an orientation session at Nags Head Woods,
- Complete registration forms including vehicle information,
- Pay a \$50 fee,
- Display a registration card in their vehicle while hunting, and
- Complete a year-end survey.



*We are very grateful for the Town of Kill Devil Hills' support both this year and in past years!*