Into the Woods

Summer Scholars partner with Mariners' Park to study wildlife

by Kelli Caplan | September 4, 2025

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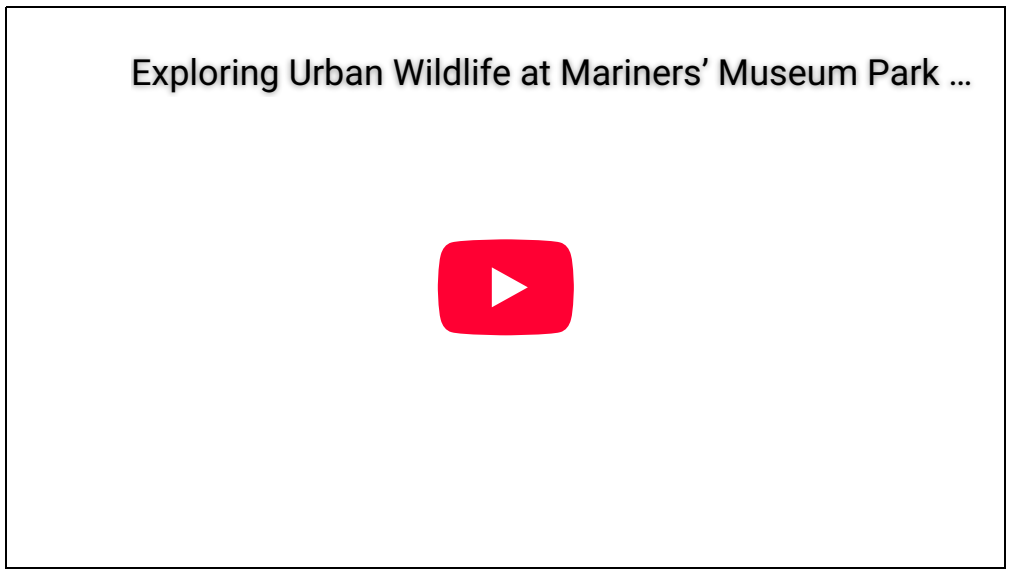
Jonas Miller '26 and William Murray '26 have spent much of the summer in the woods.

They were not hiking or camping. Rather, they were on a research project as Summer Scholars. Their two-fold mission: to catalog the city's wildlife and put a number on how many deer are living in nearby Mariners' Park.

The research came about organically. Mariners' Park was grappling with a growing deer population within its 550 acres in Newport News. Park officials reached out to CNU for help, as they share a longstanding partnership with the University and knew it was the go-to for insight and answers.

That's where biology majors Miller and Murray, armed with the powerful trifecta of technology, a love of all things outdoors, and a thirst for knowledge, enter the picture–or the woods, if we're being precise.



Miller set up 11 outdoor cameras throughout the park to capture images of furry park residents. Murray deployed a drone equipped with a thermal camera that detects in real-time heat emitted by deer, allowing him to see where they were clustered and how they moved.

Together, they focused on trying to determine not only the deer population in the park, but also how animals adapt in an urban environment. The Captains sought to capture the essence of park life from the viewpoint of the animals. Were they healthy? Did they have enough to eat? Were they overcrowded and having to leave the park to dine on neighbors' landscaping?

The Summer Scholars took a deep dive into Newport News' furry four-legged populations, and in the process, discovered a "wild" side of the city they have called home since starting CNU.

"I have seen tons of deer, coyotes, racoons, opossum, snakes and box turtles," Miller said. (Want to take a peek at what Miller has seen? Click on the accompanying video.)

For both Miller and Murray, being able to research urban ecology has been incredible, as both of them would like to pursue some aspect of the field as a career.

Summer Scholars, a collaborative CNU program offered through the Office of Research and Creative Activity (ORCA), pairs students with faculty to conduct paid research that often results in published results and a boost on the career track. Research is a high priority on campus, as it is one of the Four Pillars of a CNU education. It also strongly aligns with the University's Strategic Compass priority of connecting with the local community.

"I love being outside," said Murray, who also hopes to find a job that involves wildlife and national parks. "I never thought I would be able to do this kind of research. Summer Scholars is a very good opportunity to let students get into research. It has given me the time and space to delve into research and do what I want to do."

The unique positioning of the huge park within city limits, and within a short walk of campus, provides CNU students with an ideal living laboratory to study game patterns, ecology and conservation.

"It's a symbiotic relationship benefiting both of us with very tangible results," said Dr. Rick Sherwin, professor of biology who is overseeing Murray's project.

This summer, Miller and Murray not only broadened their research capabilities, but also helped a community partner in the process.

Dr. Jason Hart, a psychology professor who worked with Miller on his research, hopes the project can grow in the future to include even more of a community focus, by "assessing local people's knowledge and attitudes about the wildlife in Newport News."

Mariners' Park will use the results from this summer's research to determine the best way to manage the deer population and to create the healthiest home possible for its inhabitants.

"As an urban park, we aim to create the best possible environment for our wildlife and the community to coexist,"

said Erica Deale, Director of Mariners' Park Department and a Captain for Life. "In order to do that, we need to understand the population size of our deer. Up to this point, we have made educated guesses based on herd movements, but had no firm numbers. Once we receive the data from the studies conducted with CNU, we will be able to make better choices to support the populations."

Miller has kept journals, catalogued his findings, and watched footage in hopes of determining if the creatures are thriving in their ecosystems and what steps can be taken to ensure they continue to remain healthy. He has studied their population trends, food availability, and survival and travel patterns.

Being able to participate in this type of research as an undergraduate has not only driven home what he wants to do, but also will help him to add experience to his resume that is often reserved for graduate students.

> "This has shown me what my ideal job looks like. It has been absolutely amazing," Miller said. "If I can get research published as an undergraduate, it will definitely help me with my career."

Both Murray and Miller plan to continue their research into the school year, hoping to build a clear image of the park's ecosystem.

For Deale, who earned both a BS in biology in '09 and a MS in environmental science in 'll from Christopher Newport, the relationship between the park and the University has proven personally and professionally rewarding.

"There are so many talented individuals at CNU, and the park has benefited greatly from an increase in research and knowledge about our urban oasis," she said. "The partnership enhances our understanding of Mariners' Park, enabling us to make informed management decisions and improve our research techniques. I cannot wait to see the results from the recent research!"