Deer becoming a national park nemesis

Invasive plant species and climate change are also threats to historic acreage

Kenneth C. Crowe II April 13, 2023



10f17A female deer is spotted in the woods at Saratoga National Historical Park on Monday, April 10, 2023, in Stillwater, N.Y. Saratoga National Historical Park is one of 10 national parks in the northeast identified as suffering severe damage to its trees from deer in the park. Will

Waldron/Times Union



STILLWATER — Looking across the sweeping acreage at the Saratoga National Historical Park, with its mix of fields and forest, it's hard to imagine that the landscape capturing the look of 1777 is at risk.

But an overabundance of deer, invasive plant species and climate change are challenging the National Park Service's mission of maintaining the park so visitors can experience how the cultural landscape felt during the two Battles of Saratoga.

While walking through the forested plots scattered across the battlefield, Park Superintendent Leslie Morlock points out where insects like the emerald ash borer are attacking trees. And the saplings that should be sprouting to replace those dying trees? The deer that roam the park have eaten them.

Read More

The historic reflection that's also told by 10 other National Park Service sites in New England, the Northeast and Mid-Atlantic states are under duress due to the assault on the woods that form key parts of the parkland placing them in "imminent failure," according to a recent study conducted by NPS and Schoodic Institute at Acadia National Park in Maine scientists.

More Information

PARK	TOTAL ACREAGE	FOREST ACRES V	VOOD PLOTS
Saratoga National Historical Park	2,856	1,697	32
Roosevelt-Vanderbilt National Hist	coric Sites 1,102	2 835	5 40
Sagamore Hill National Historic Sit	e 71	42	4
Weir Farm National Historical Parl	k 69	44	10

Source: National Park Service study in "Ecological Applications"

SEE MORE

"In a healthy forest, when a big tree falls or dies, seedlings and saplings in the forest understory grow to fill the gap in the canopy. This regeneration is how forests continue to be forests," Kate Miller, park service quantitative ecologist and lead author of the study, said in a statement.

"If there's a lack of seedlings and saplings, the forest can't maintain itself. This is what we found in the majority of Eastern national park forests, and it's very concerning," Miller said.

The study found that deer are the primary threat to the future of forests in 39 national parks from Maine to Virginia. Only Acadia National Park in Maine was classified as "secure" and not facing the immediate threats to forests in the other 38 parks.

Stephanie Perles, park service vegetation ecologist and study co-author, stressed in a statement the growing deer populations in the parks are eating the vegetation and saplings to such a degree it stops the growth of new trees and prevents the regeneration of the forest canopy.

"Without native seedlings and saplings, invasive plants, which deer don't like to eat, take over. Both the forest and, ultimately, the deer and every other forest creature, suffer without food and no place to go," Perles said.

In New York, the Department of Environmental Conservation also warns that deer may be permanently altering forests. DEC's review of the impact of the large number of deer states, "just as livestock can overgraze a range and reduce it to a barren wasteland, deer can overbrowse a forest. Because mature canopy trees aren't affected, deer impacts on a forest may not be immediately obvious, but they are profound and long-lasting."

The 32 forest plots at the Saratoga National Historical Park and the four plots at Sagamore Hill National Historic Site, the home of President Theodore Roosevelt on Long Island are classified as in "imminent failure," according to the study. The Roosevelt-Vanderbilt National Historic Sites' 40 wood plots in Dutchess County are classified as "insecure." The 10 wood plots at Weir Farm National Historical Site in Wilton, Conn. are classified as "probable failure."

Roosevelt-Vanderbilt Superintendent Amy Bracewell said the park, site of President Franklin D. Roosevelt's home, the Vanderbilt Mansion and Eleanor Roosevelt's Val-Kill, has to deal with the deer in order to protect the trees. The forests are especially important for the Gilded Age landscapes at Vanderbilt and the forest plantations by the former president.

Bracewell said they want to get at least three years of data before starting the process of figuring out what to do with the deer.

Saratoga is also grappling with how to reduce the deer population and ease the threat to the woods. Saratoga and the other parks generally don't allow hunting within their boundaries and their park management plans haven't identified how to reduce the deer population.

"The challenge is you start deer culling you have to continue to manage it," Morlock said.

While the parks are studying how to update their plans to reduce the threat posed by the deer to the landscape, they know that hunters outside the parks can play a role in reducing deer numbers in the surrounding area.

"We are experiencing similar forest challenges relative to the region," said Linda A. Cook, superintendent of the Weir Farm site in Wilton, Conn. Like the other parks, Weir also has to do a feasibility study to plan how to preserve and protect the land.

Email SIGN UP

By signing up, you agree to our Terms of Use and acknowledge that your information will be used as described in our Privacy Policy.



Written By Kenneth C. Crowe II Reach Kenneth C. on

Kenneth C. Crowe II covers Rensselaer County for the Times Union. He writes about Troy, US Census, northeastern Albany County and whatever else comes up. Screenwriting is a fascination. You can reach him at kcrowe@timesunion.com.