



Mark Weckel extracts a deer DNA sample as part of his research on deer population control efforts.

MIANUS RIVER GORGE PRESERVE

Managing Deer in Suburban New York

As in many Northeastern natural areas, the burgeoning white-tailed deer population is ravaging tree saplings and wildflowers at Mianus River Gorge Preserve in the suburban county of Westchester, New York.

The land trust compared 2004 conditions to 1966 vegetation surveys and found that seedling density had declined by 85% and saplings of 12 tree species could not be found.

In this populated area just north of New York City, rifle hunting was not possible. Instead, the land trust began partnering in 2004 with local bow hunters to harvest deer, hoping to decrease their population. Director of Research and Land Management Mark Weckel has monitored the effectiveness of bow hunting to restore baseline vegetation conditions, and sets control areas with deer exclusion fences.

His conclusion? Bow hunters are unlikely to reduce deer within a local area to historic levels, but they can make some improvements. Foresters identify historic deer populations at 15 per square mile. Bow hunters have reduced deer on the preserve from 60 per square mile to 40 over seven years but are unlikely to make any further reductions, he explains.

Weckel says even these modest decreases have made a difference on the preserve, particularly in undisturbed areas where native plant seeds are waiting to make a comeback. "Seedling diversity is up, and we're seeing higher flowering rates for wildflowers," he says. "However, advanced regeneration, including a dense, diverse understory, remains elusive."

For more information on Mianus River Gorge Preserve's deer program, see www.mianus.org/what-we-do/land-stewardship. •



River otters make their home on the newest addition to Patoka River National Wildlife Refuge.

STEVE GIFFORD

Partnership Adds Land to Indiana Refuge

For more than a decade, a property connecting two sections of the Patoka River National Wildlife Refuge was the refuge's top priority for acquisition. Once partially mined, the 1,043-acre tract in southwestern Indiana had been rehabilitated into prairie, ponds, wetlands and forest, and contains river otter, bobcat and rare and endangered species, such as the copperbelly water snake and the cerulean warbler.

Just when a government purchase seemed close, it ended in a stalemate over language in the proposed warranty deed. With "for sale" signs already on the property, Sycamore Land Trust stepped in to purchase the land with a loan. "We literally could not have done it without Sycamore Land Trust," says Refuge Manager Bill McCoy. "We were going to lose it."

The land trust's flexibility and a determined coalition of public and private partners and funders saved the land from development. Landowner Peabody Energy sold the property at a bargain price, and the U.S. Fish and Wildlife Service purchased a conservation easement from Sycamore Land Trust allowing the agency to manage it as part of the refuge. The purchase links 5,000 contiguous acres under refuge management.

"A lot of people worked for years to make this happen," says Sycamore Land Trust Executive Director Christian Freitag. "Conservation groups, private industry, government agencies—all working together. We all knew how important this parcel was." •