



Skeptics said it couldn't be done. But today, Eastern Screech-Owls roam



The Screech-Owls of Central Park

by Robert DeCandido photos by Deborah Allen

ca's most famous urban park, almost half a century after they disappeared.

A

ll around us it was dark, very dark. In the distance on Central Park South, the lights from the buildings glowed like a faraway galaxy of stars in the cold night air. Nearby we could see the occasional flicker of a cigarette as its owner drifted past our group. We owl-watchers huddled closer together, and I put the cassette into the tape player. Nervous giggles from the group mixed with the recorded tremolo of an Eastern Screech-Owl. Again and again the tape played while people waited and hoped, trying to see into the darkness.

Then we saw the silhouettes of two Eastern Screech-Owls above us in the trees. Moving their heads slowly from side to side, the two young owls watched us, and we did our best to watch them. They began to call back to the tape, and now and again they fluttered slowly over us like big moths. When one landed close by, the group responded with oohs and aahs. Perhaps the screech-owls had been roosting nearby. Or perhaps we summoned them back from the beyond to share this brief moment with us.

In the winter and spring of 2002, I witnessed this scene several times: The communion of people and owls beneath a starry night surrounded by the Manhattan skyline. The owl-watchers were members of the Linnaean Society of New York, the New York City Audubon Society, the Central Park Conservancy, and just plain New Yorkers who had heard about our owl walks. All became part of a team of roving nighttime naturalists. The two young owls that flew in to visit us were the offspring of the first successful nesting of the Eastern Screech-Owl in Central Park in more than 50 years. The owls still breed in other parts of New York City, of course, but they were only a memory to veteran Central Park birdwatchers. Now they were back and nesting in the heart of Manhattan. How did this happen?

In 1997, while working for the New York City Department of Parks, I embarked upon a project to reintroduce the Eastern Screech-Owl into Central Park. At the time, the idea was controversial: If no one knew what had caused the owl to become extinct in the park, why would anyone even consider trying

to re-establish them? Even worse, some people considered this to be nothing more than a publicity stunt by the New York City Department of Parks. I was asked repeatedly how I could participate in such an act.

After a great deal of research, I knew that the owl's biology would work in favor of the reintroduction. Eastern Screech-Owls in the New York City area are not known to migrate. If released, the owls would very likely remain in the area. I also knew that wildlife rehabilitators frequently take in injured screechers, so a ready supply of first-year owls would be looking for a place to call home. What's more, by reintroducing the owls in Central Park we could answer important questions for biologists and wildlife rehabilitators: What is the relative survival rate of released screechers? Could the owls fend for themselves and even reproduce after release into the wild? I began planning for the release of the owls by examining the history of the Eastern Screech-Owl in Central Park.

Puzzling Disappearance

In 1867, just a few years after Central Park was opened to the public, the Eastern Screech-Owl there was described as abundant and as a permanent resident that built its nest in the crevices of the rocks in the Ramble, as the wilderness in the heart of the park is known. By 1924, when there were only eight breeding bird species known in the park, Ludlow

Griscom, the dean of field ornithology, wrote that there were still "several resident pairs" of Eastern Screech-Owls. The screecher must have been one tough species: Blue Jays, Red-bellied Woodpeckers, Tufted Titmice, Great-crested Flycatchers, and Green Herons are just a few species that were not breeding in Central Park in the early 1920s. Each nests there today.

In the 1930s, a family of Eastern Screech-Owls was located in the park's north end. Another nest was found in 1949, but by the late 1950s, the owl was no longer considered a resident species. The American Kestrel was also lost as a breeding species at this time, although the falcon still nests on buildings just outside the park. It seemed clear to me that whatever factors had caused the local extinction of these raptors were at work in the park itself.

All that would have been needed to eliminate the screech-owl was the loss of a few males (or females) in a short time frame. Bad weather during the nesting season or intensive removal of dead trees could have played a role. Other factors may have included the indiscriminate use of pesticides, collisions with vehicles and an increase in the number of predators, such as raccoons.

Actress Isabella Rosellini releases a screech-owl into the Central Park darkness with Len Soucy of the Raptor Trust (center) and former New York City Parks Commissioner Henry Stern.



Thanks to the leadership of the Central Park Conservancy, the park by the 1990s was looking great. Park managers were interested in restoring native species but also had to balance the needs of wildlife and the safety of park visitors. This is no small task in a place that receives more visitors each year than all of New York's sports teams combined. To their credit, key park workers were trained and certified in the proper application of rodenticides. Also, the removal of dead trees and limbs was usually limited to those that might fall on pathways or benches. All in all, not a perfect situation, but it was better than it had been in the recent past. By 1998, it seemed as though Central Park was a reasonable place to reintroduce an important native species. The entire world could watch and judge the results.

At dusk on a warm August evening in 1998, Len Soucy, founder and director of the Raptor Trust in New Jersey, arrived in the park with six rehabilitated Eastern Screech-Owls. The first-year owls had either fallen from the nest, been injured, or been found in a dangerous place well away from their parents. Now they were successful graduates of "mouse school," having been certified in small-mammal capture by Raptor Trust staff.

Promising Release

Soucy placed silver U.S. Fish and Wildlife Service bands on the owls' legs and then, assisted by actress Isabella Rosellini and members of the Linnaean Society and New York City Audubon, set the birds free. After momentarily looking around at their new home, the owls flew off into the darkness.

Over the course of the next three years, Central Park birdwatchers and I tracked the six owls during regular day and night walks in the park. In cool weather during the day, we found the owls perched at the entrance of tree cavities. But once the trees had leafed out in spring, the owls slept on branches hidden by foliage. Our pursuits were made easier by resident jays, titmice, catbirds, robins, and Red-bellied Woodpeckers, which led us to the owls with their scolding calls. At night, we roamed Central Park with a boom box, trying to summon the owls with tape-recorded calls.

Of the six owls, at least three survived for more than a year. This is a

higher survival rate than biologists have found in "wild" populations of first-year Eastern Screech-Owls. Of the six, a gray-morph female was alive through the early summer of 2002. As it turned out, she would prove to be one of the stars of the project. Other owls from 1998 did not fare as well. A red-morph male was found dead in December 1999, the victim of a collision with a building. Toxicology analysis showed no detectable levels of rodenticides, herbicides, or insecticides. Oddly, this was good news since we had feared that rodent poisons might be a serious threat to the owls. By the summer of 2001, we knew the whereabouts of only one owl. Two others had been injured or died, and three others had disappeared without a trace. The survival rate after three years was roughly 16.7 percent (1 of 6), or slightly below the average for Eastern Screech-Owls in suburban and rural areas of the United States.

In September 2001, we released 18 additional first-year Eastern Screech-Owls. To follow their movements, researchers fitted all but one with battery-powered backpack transmitters. But 12 of the 17 owls slipped out of the devices. Several were subsequently re-trapped and fitted with a new design, but the owls escaped from these as well. And other problems arose: Because of the buildings surrounding the park and the rock outcroppings in it, finding the exact location of even a transmitter-equipped owl proved difficult. Technology is a wonderful thing when it works properly, but when it does not, what is a scientist to do?

Once again, the Central Park birders came to the rescue. When they learned that their sightings of roosting screechers were important, we received many reports. On walks between October 2001 and June 2002, my team of nighttime naturalists and I watched newly released Eastern Screech-Owls at home in the park. One evening, we observed an owl looking for prey along the shore of a pond. We left after about 10 minutes with the owl still intent on catching dinner. Another day, the group waited at dusk for a screech-owl to fly out of its roost cavity. Instead, we saw two owls (a red-morph female and a gray-morph male) leave within a few seconds of one another. Finally, on a wintry Saturday evening, we watched two gray-morph

Central Park Menu



Since we needed to know what the Central Park screech-owls were feeding on, I conducted an intensive search for owl pellets. Then I analyzed the pellets' contents under a dissecting microscope.

What had the owls been eating? In the late winter of 2002, they were feeding primarily upon small rodents such as white-footed mice and young rats, and the occasional bird. Scales recovered in one pellet indicate that at least one owl had eaten a fish as well. The results indicated to me that, even in winter, Central Park was providing the screech-owls with sufficient food sources — sources that would only grow richer with the onset of warmer weather, with its influx of migrating birds, insects, and other invertebrates such as earthworms.

— Robert DeCandido

Screech Owl Finders



If you'd like to try to find Eastern Screech-Owls in Central Park (including the two beautiful fledglings above), your best bet is to hook up with a group that regularly birds the park. Most bird walks require advance registrations, and waiting lists are common. Here's contact information for organizations that sponsor bird walks: New York City Audubon Society, 212-691-7483; the Linnaean Society of New York, 212-252-2668; and the Nature Conservancy, 212-381-2194. For young birders, the Central Park Conservancy (212-310-6600) supplies backpacks with binoculars, a guidebook, and other goodies at Belvedere Castle. The Urban Park Rangers (800-201-PARK) lead nature walks for school groups on weekdays and families on weekends.

owls copulating in a tree. These and similar observations made us hopeful that the owls were doing okay in their new home.

By the spring of 2002, I estimated that at least 10 of the 18 owls released in September 2001 could be reliably accounted for. Three had definitely died. The remaining five may or may not still be alive.

On March 28, 2002, something extraordinary happened in a quiet sort of way. That morning, a gardener for the Central Park Conservancy found two owls perched next to one another in a small tree. It was a nice sighting, but not unprecedented. No one thought much about it. At least not right away. A few

days later, my friend Merrill Higgins left a message on my answering machine, urgently summoning me to Central Park to see two special owls. When I arrived, I found a crowd gathered around Merrill's spotting scope oohing and aahing. Tears welled up in my eyes when I finally took a look, for the two owls were indeed different from all the others we had watched since 1998. Why? They were covered in gray, downy fuzz. They had just fledged from a nest! Merrill had identified the first young Eastern Screech-Owls in the park since 1949.

One of the parents was a gray-morph female we had released in 1998; the male was a gray-morph bird released in September 2001. We had seen the birds



copulating on an owl walk just a few weeks earlier. Now their offspring were delighting veteran birdwatchers and people who had never seen an owl before. Already, the owls were fulfilling an important mission in their new home: making people aware that wildlife and people can co-exist even in the heart of the toughest city in North America.

It had been only six months since the second group of screech-owls had been released, and six months since September 11. Seeing the two owls together that night and on evenings thereafter made me feel as though five years of

Robert DeCandido, left, leads birders in search of screech-owls in Central Park last February.

hard work had paid off. But only time will tell if the Eastern Screech-Owl will once again become permanently established in Central Park, with a self-sustaining breeding population of four to six pairs. Meanwhile, we have made a promising start.

From a biologist's point of view, we now know that rehabilitated Eastern Screech-Owls can survive and breed even in an urban habitat. Also, first-year screech-owls most likely can nest successfully only with older individuals, contrary to what some scientists had hypothesized.

Perhaps the most important thing we rediscovered during the project was the importance of people. From the work of

the raptor rehabilitators to the information provided by the Central Park birders regarding the whereabouts of the owls, to our roving band of night-time naturalists, the Eastern Screech-Owl project benefited in so many ways from the efforts of concerned individuals. Not only did people contribute their time and skills, they made this endeavor fun. ■

Robert DeCandido is an urban ecologist. Following the economic downturn in the wake of September 11, he was laid off from his job with the New York City Department of Parks. His research on birds of prey includes raptor migration studies in Turkey, Nepal, Malaysia, Spain, and of course, New York City.

