

Northampton County Parks & Recreation

2024 CONSERVATION SUCCESS STORY

Purple Martin Nesting Colony Project

SUMMARY

In 2020 & with technical assistance from Lehigh Valley Audubon Society volunteers, we installed two purple martin nesting towers at Minsi Lake in hopes of establishing a purple martin colony there. Since then, our partnership has installed five towers at the lake. Each tower supports 18 plastic nest gourds, which are referred to as condos. We now have 90 lakeside condos at Minsi that have been home to hundreds of pairs of breeding martins, which have produced 451 chicks over the past five years. As in each of the previous four years, licensed bird banders with the Lehigh Valley Audubon Society documented & banded this year's hatch of martin chicks. We now have the largest purple martin nesting colony in the region.



PURPOSE

The primary purpose of this project is to provide nesting habitat for purple martins. Martins are the largest members of the swallow family & are listed as a Species of Greatest Conservation Need by the PA Game Commission & the PA Audubon Society. Martin populations have plummeted since the 1960s, due in large part to a loss of nesting habitat. Martins breed in colonies near lakes & ponds with plenty of insects to feed on & nearby cliffs or stands of trees with lots of cavities in them for nesting sites. However, martins are unable to compete with aggressive, invasive cavity nesting birds like, European starlings & English house sparrows, which have put martins out of house & home across much of the country. Today, purple martins east of the Rockies are almost entirely dependent on human made birdhouses for nesting habitat. Martins will readily nest in artificial structures specifically designed & built for them & placed near waterbodies that provide lots flying insects for food. Our project serves to provide nesting structures for purple martins along the shoreline of Minsi Lake, with its abundant supply of the martin's favorite prey—dragonflies.

A secondary purpose of this project is to monitor & document purple martin nesting activity in the five condo towers at Minsi Lake. This process involves weighing, measuring & placing harmless leg bands on martin nestlings when they're between 12 & 21 days of age. This information is then entered into databases that track the



PARTNERSHIP IS KEY

We thank Lehigh Valley Audubon Society volunteers for assisting us with the installation of all five martin nesting towers for this project, monitoring them with us & banding martin nestlings during the nesting season & maintaining the towers with us throughout the year. We also thank Friends of Minsi Lake for funding three of the five purple martin towers & educational signs about the project at Minsi Lake Park.



RESULTS

This year, purple martins nested in 88 of the 90 condos at Minsi Lake. They produced 367 eggs, of which 245 hatched & 233 nestlings successfully fledged. Our team was able to measure, weigh & band 236 of the 245 chicks that hatched. Of those 236 chicks, three died before fledging, which is well within the expected mortality rate for purple martin nestlings.

In addition to banding martin chicks with numbered aluminum leg bands issued to our licensed bird banders by the Bird Banding Lab in MD, we also began placing color-coded aluminum leg bands on martin nestlings at Minsi Lake this year as part of a regional study to monitor nest fidelity & dispersal of martins in five counties in eastern PA. Lehigh Valley Audubon Society volunteers manage 372 condos on 15 towers at 12 sites. Each site has its own unique color-coded bands. Sighting color bands is the most efficient way to see if martins remain loyal to the colonies in which they hatched or are dispersing to other colonies after they return to their breeding grounds here in eastern PA from their wintering grounds in South America each spring. This citizen science project will help bird biologists better understand site fidelity & dispersal rates of purple martins, which can inform management practices for these fascinating & beloved long-distance migratory songbirds.

The information on both leg bands is submitted to several databases that help researchers track trends in bird populations & conservation, like the Bird Banding Lab in Laurel, MD; the Cornell Lab of Ornithology in Ithaca, NY; & the Purple Martin Conservation Association in Erie, PA.



Annual Project Timeline

**March:** Hang condos on the towers & place pine straw in each one for starter nests.

**April:** Martins begin to arrive from their wintering grounds in South America.

**June-July:** Weekly condo nest checks; examine nestlings for parasites; clean out the condo nests & freshen them up with clean nesting material if needed; band the nestlings at 12+ days of age; host interactive public education programs during each nest check.

**August:** Martins leave for South America

**September:** Take down, clean out & store the condos indoors until next March.



COMMERCIAL FAÇADE IMPROVEMENT PROGRAM



RESIDENTIAL FAÇADE IMPROVEMENT PROGRAM



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SLATE BELT RISING



RESIDENTIAL AND COMMERCIAL FAÇADE IMPROVEMENT PROGRAM

The Residential and Commercial Façade Improvement Programs are designed to help improve the exterior appearance and condition of residential and commercial properties within the four boroughs. The program's goals are to maintain historical and architectural integrity, improve neighborhood appearance, and help property owners make exterior repairs to their homes or businesses while increasing property values for all borough residents.



ABOUT SLATE BELT RISING

Slate Belt Rising is a neighborhood revitalization initiative designed to integrate and capitalize on the substantial assets of the individual Slate Belt boroughs of Wind Gap, Pen Argyl, Bangor, and Portland. While Slate Belt Rising specifically targets these four boroughs, some initiatives promote development and coordination of services throughout the entire region.

More information is available on our website under the Services tab, including program guidelines and applications Visit [slatebeltrising.org](http://slatebeltrising.org).

PROGRAM OF COMMUNITY ACTION

Community Action Lehigh Valley is an anti-poverty non-profit offering programs and services in Advocacy, Business Start-Up and Development, Food Access and Nutrition, Housing, Neighborhood Revitalization, and Youth.



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