

Our Feathered Neighbors - The Purple Martins

Who are the Purple Martins?

- Purple Martins, North America's largest swallow species, are the 'people's bird' as they depend on humans to establish a protective home to nest their babies. The males are broad chested with dark blue-purple coats on their backs, hence the name "Purple Martin." The female on the other hand wears a duller coat, with a 'collar' of grey feathers around the neck. This distinction is consistent with other bird species as well, where the male dons a more attractive display of feathers. Known as "aerial insectivores", their diet consists of flying insects such as beetles, grasshoppers, cicadas, moths, wasps, tree bugs, and dragonflies.
- According to The Wildlife Society, since 1976 the Purple Martin population has decreased by about 2% each year. Scientists believe this is due to unknown threats in the Amazon Rainforest, where they migrate to during the winter. The growth in agriculture and logging in the Amazon are resulting in environmental destruction which means loss of habitat. Other's propose that it is due to the widespread use of pesticides. An experiment in America and Canada shows that 85% of the chicks make it past fledgling the gourd. Scientists have updated the gourds for protection from their predators, resulting in an uprising population. The gourds are truly a vital tool that assists the Purple Martins in order to help them thrive, though this means that the younger generations will have to do their part.

In the beginning

- Purple Martins originally nested in hollow trees without the help from humans. However, things changed when the Native Americans would hang up a hollow gourd on a pole, which enticed the Martins to start to nest this way. The Native Americans continued to set the gourds up, as they enjoyed the company of this special bird. The tribes would sing and listen to the Martins' songs, as they chirp to each other in the gourds. More and more Native American tribes started housing the birds outside their homes, resulting in the development of a long-standing tradition. When the Europeans came to America, they enjoyed the Purple Martins songs as well, along with the fact that they would eat the unwanted insects, thereby curbing the insect populations. This trend caught on with the settlers, and they started creating the gourds as well. This is where the peaceful relation between humans and the Purple Martins started. It is quite remarkable how these birds have accepted the hospitality of humans. There was even a debate of whether their name should be changed to 'The People's Bird'. We need to conserve the beautiful history of the Purple Martins.

Habitat - Gourds

- There are currently nesting gourds all throughout New England. During the spring and summer seasons the Purple Martins come from parts of South America to New England to build their

nest and lay eggs. At present, Tod's Point holds three sets of gourds, for a total of 36 gourds. It would surprise you how fast the cute little chicks turn from eggs in to adult Martins. Each mother can typically lay 3-8 eggs at a time. Some of the eggs are not always viable. The mothers will sometimes knock the unviable egg out of the gourd. The mother then incubates the eggs for 15-18 days. Once the egg has been hatched, both parents will feed the chicks. The young will leave the nest about 26-31 days after hatching. Originally, when the gourds are installed, small wood chips will be placed in each gourd and as the colony arrives, the parent will pick which one they would like to lay their eggs. The Martins begin by artistically setting up small twigs as a bed-like form. They will then get green leaves; which signifies that the mother is about to lay eggs. Unfortunately, we have also seen Purple Martins bring in pieces of plastic in the gourd.

Citizen Science

- To help monitor Purple Martin populations and understand dispersal patterns, Greenwich teamed up with CT Department of Energy and Environmental Protection (CT DEEP) to band the fledglings at Tod's Point. Juveniles are fitted with both a metal band and a colored plastic band. The metal band has a nine-digit number engraved on it to identify the individual, while the colored-band signifies the location where the bird was banded. Greenwich's colors are blue, or blue and yellow (two bands) so that they can be identified in other areas.

Greenwich Population

- This year proved to be another successful year at Tod's Point for the Purple Martin. At the height of the season, we had 86 eggs laid with about 70 fledglings over 19 active gourds. Next summer, an additional colony will be installed at Byram Park.

About Authors

- Ellie Tiedemann is a local resident of Tod's Point. She is an upcoming sophomore at Berkshire School. She enjoys coming to Tod's Point. Despite living so close to Tod's Point, she didn't realize that this beach hosts Purple Martins. She says, "To be honest I didn't even know what Purple Martins were". Sarah Cocco and Ellie met through email and invited her to come look at the newly hatched chicks in the summer of 2019. For the past 3 summers she and Sarah have been consistently checking up on the gourds every week, analyzing the bird behaviors and counting the number of eggs that have hatched. After looking up the Purple Martins, Ellie realized that there weren't many educational articles. She says, "Purple Martins are truly an incredible species with a fascinating background and I believe that more people should be aware of our feathered neighbors".

- Sarah Coccaro is the Conservation Resource Manager for the Conservation Department. Sarah grew up in Sandy Hook, CT and now live in South Salem, NY. She manages a number of wildlife programs here in Greenwich, but one of her favorites is the Purple Martin colony at Tod's Point. This past year, we worked with the Friends of Greenwich Point to install an educational sign, which has really helped Park visitors learn and understand more about this special species.

Citations:

1. "Purple Martins How It All Began." *Purple Martins - How It All Began*, www.birdwatching.com/tips/purplemartins.html
2. "Purple Martin." *Audubon*, 22 July 2021, www.audubon.org/field-guide/bird/purple-martin.
3. Smith, Joe, et al. "Purple Martins: The Bird That Relies ON Human-Built Nests." *Cool Green Science*, 24 Feb. 2017 blog.nature.org/science/2016/09/12/purple-martins-the-bird-that-relies-on-human-built-nests/.
4. "Purple Martin OVERVIEW, All about Birds, Cornell Lab of Ornithology." *Overview, All About Birds, Cornell Lab of Ornithology*, www.allaboutbirds.org/guide/Purple_Martin/overview