BTNEP's Prothonotary Warbler Conservation & Monitoring Program

Prothonotary Warblers are Neotropical migratory songbirds that have experienced a 40% decrease in overall population since the 1960s.

Prothonotary Warblers breed in lowland forested wetlands throughout the eastern U.S., including the estuary, and winter in mangrove forests in Central and South America. Because it is so habitat specific in both its breeding and wintering areas, habitat degradation and destruction is one of the species' greatest threats.

In an effort to implement conservation actions for Prothonotary Warblers and to collaborate with other conservation organizations' primary goals for the species, the Barataria-Terrebonne National Estuary Program (BTNEP) initiated its Prothonotary Warbler project in the spring of 2016.

BTNEP conservation actions include:

- Establishing Prothonotary Warbler nest box trails
- Nest box monitoring and data collection
- · Community education and outreach



BTNEP installed 86 Prothonotary Warbler nest boxes within the estuary.

BTNEP's Prothonotary Warbler Conservation & Monitoring Program Nest Box Trails

Brownell Memorial Park - Morgan City, LA

Mandalay National Wildlife Refuge - Houma, LA

Avoca Island Cutoff Canal - Morgan City, LA

Lockport Elevated Wetlands Boardwalk - Lockport, LA

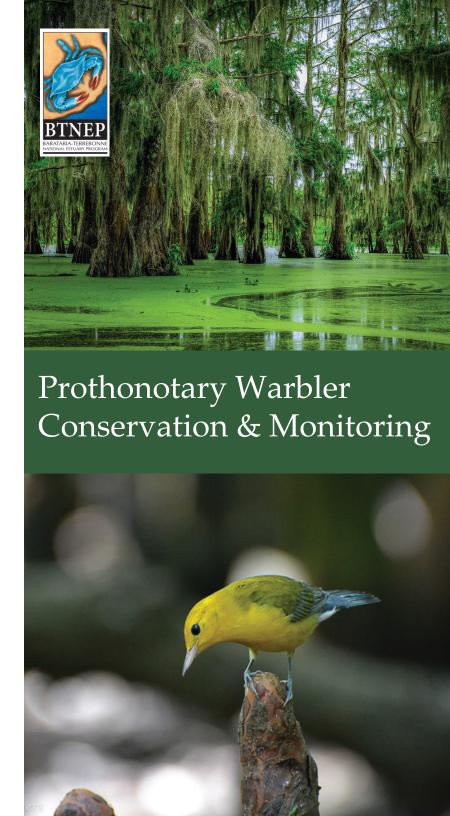


Thanks to our partners!

Audubon Louisiana
Department of Justice
Brownell Memorial Park
Wetland Tour and Guide Service
Mandalay National Wildlife Refuge
Prothonotary Warbler Working Group
Barataria-Terrebonne Estuary Foundation



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A year in the life of a Prothonotary Warbler

MEET GALADRIEL



This tiny songbird, nicknamed *Galadriel* by researchers, is a female Prothonotary Warbler. *Galadriel* weighs only half an ounce, about the weight of five pennies, but don't let her small size fool you. She has traveled a minimum of 5,000 miles

during her migratory journey from Louisiana to Columbia and back. This is her story.

In early June 2016, *Galadriel* was observed nesting in nest box number B12, one of the 16 Prothonotary Warbler nest boxes installed by BTNEP within Brownell Memorial Park & Carillon Tower in Morgan City, Louisiana. On June 9, 2016, she was caught by BTNEP and Audubon Louisiana biologists and equipped with unique leg bands so researchers could identify her as an individual. In addition to her bands, she was outfitted with a light level geolocator, a very small 'backpack' data logger, that sits on her back and records essential data about her migration route.

After *Galadriel* was banded and equipped with the geolocator, she continued to tend to her nest, successfully raising three young during the month of June 2016. By mid-August, Galadriel began her epic migration to her wintering grounds in South America. In order for researchers to obtain the data from the geolocator to map out the bird's migration, the bird must be located and recaptured the following spring. Prothonotary Warblers have high nest site

fidelity, meaning the bird will return to the same nest site if it was successful during the previous breeding season; however, the bird must first survive the many risks associated with migration.

The following spring, on April 11, 2017, *Galadriel* was spotted building a nest inside nest box B11, just next door to the box she nested in the previous year! BTNEP biologist, Natalie Waters, recaptured her and removed the geolocator, now loaded with data, and returned the geolocator to Audubon Louisiana for data compilation and analysis. The data gathered from the geolocator revealed Galadriel's extraordinary migratory journey.



Natalie Waters, BTNEP Bird Conservation Coordinator

In early August 2016, she began traveling to her wintering grounds. She flew across the Gulf of Mexico and landed in the Yucatan Peninsula, Mexico and traveled across several countries throughout Central America until she reached her final wintering grounds in northern Colombia by the end of September.

By March 1, 2017, she had left her wintering home to return to her breeding grounds in Louisiana. She returned to Brownell Memorial Park by the end of March, completing her spring migration in just a few weeks time. After the geolocator was removed in April, 2017, *Galadriel* continued nest building and successfully raised 6 young!



Galadriel's migratory journey - Estimated migratory routes of a Prothonotary Warbler fitted with a geolocator at Brownell Memorial Park and Carillon Tower, Morgan City, Louisiana. Locations are labeled with associated dates. Fall migration took place Aug-Sept, 2016, and is indicated by the orange line. Spring migration took place March 2017, indicated by the green line. Map and data source: Audubon Louisiana

Migratory data gathered from *Galadriel's* geolocator will be combined with additional Prothonotary Warbler geolocator recoveries. The data will help researchers identify important stopover wintering locations and further support the development and implementation of an international conservation plan for the species.

Research protecting native species is important to advance BTNEP's conservation efforts.