SWAMP CANDLES IN KANSAS

ANN TANNER



Five Prothonotary Warbler eggs. Photo by Greg Laube

Who doesn't love a bright splash of color in an otherwise muddy and murky setting? The brilliant yellow Prothonotary Warbler shines like a bright candle in its swampy and marshy home environment. In fact, it is often referred to as a "Swamp Warbler" or a "Swamp Candle" for just that reason. Its unique bright yellow plumage, beady black eye, and blue gray wings are eye-catching to both experienced and new birders. Most people consider the Prothonotary Warbler a bird that breeds in the swamps of Louisiana and Mississippi, but it also nests surprisingly far to the north along rivers and as far west as eastern Kansas.

My love of the Prothonotary Warblers dates back to my years growing up near Sky Lake in Mississippi. Sky Lake is both a lake and a swamp, and it is also home to Bald Cypress trees over 1,000 years old. This location is in the heart of the Prothonotary Warbler breeding grounds. When these brilliant yellow birds caught my attention as a youngster, I asked my dad about them. He did not know the scientific name for



Hungry mouths. Photo by Kathy Fox

the bird, but he called them "Wild Canaries."

The population of Prothonotary Warblers is in decline, and the birds are on the "Yellow Watch D" Conservation List of Concern. This is a list of 55 bird species with steep declines in population and major threats. The Prothonotary Warbler Working Group, established in February 2014, is a consortium of conservation and research partners in 14 states across the U.S. and in the country of Colombia in South America. This group represents researchers and collaborative partners across the breeding, migratory, and wintering range for the warbler. The group reports we have been losing these birds at an alarming rate because of habitat loss, climate change, and the hazards they face spanning two continents during migration. The birds nest primarily in the southeastern United States, but they spend the winter in the mangrove forests in Colombia. This translates into a migratory journey of thousands of miles each year.



Feeding babies in the iron pipe nesting site. Photo by Melissa Schwartz Streczywilk

Conservation and protection of the Prothonotary Warbler is a priority, since their population is in steep decline. The Prothonotary Warbler Working Group has identified migration patterns for Prothonotary Warblers in the southeast. Those nesting on the southeastern coast (including Georgia and the Carolinas) migrate through Cuba, before reaching their winter home in Colombia, South America. Those nesting in Mississippi and Louisiana migrate through Mexico and the Yucatan Peninsula, before they meet the nesting birds from the southeast for the winter in Colombia.

Decades after my first childhood sightings of "Wild Canaries," I joined the Delta Wind Birds Board of Directors in Mississippi. This non-profit organization is dedicated to protecting and creating wetlands as well as raising the awareness of migratory birds and their habitat in the Mississippi Delta. In 2021, the Delta Wind Birds group established the "Prothonotary Warbler Trail" with nesting boxes along a 14-acre



Warrior, the Prothonotary Warbler Patriarch in Wyandotte County Lake Park. Photo by Melissa Schwartz Streczywilk

site on Sky Lake. We were unsure if the birds would accept wood nesting boxes, however.

We hosted 4 active nests and learned a great deal that year, but most importantly, we learned that swamp warblers will sometimes choose wooden nesting boxes over their natural cavity tree nests in one of their favorite breeding areas in the heart of the Mississippi Delta.

Also in 2021, I completed the Extension Master Naturalist training program in Johnson County, Kansas. I have been a birder for several years, and I was aware of one pair of Prothonotary Warblers nesting in an iron pipe located in the lake behind the Mr. and Mrs. F.L. Schlagle Library at Wyandotte County Lake Park. I wondered if Prothonotary Warblers in Kansas would accept wooden nesting boxes, as they do in Mississippi. The Bluebird

Stewards Master Naturalist Team approved my request to add a Prothonotary Warbler pilot study to their group. Group members serve as monitors for the Prothonotary Warbler boxes as well as Eastern Bluebird boxes in the area. In 2022, we started with 5 wooden nesting boxes and 8 less expensive nesting boxes made from PVC (polyvinyl chloride) pipe. We installed the boxes at the known nesting site in Wyandotte County and at two other sites in Johnson County.

We had success in 2022, watching 10 Prothonotary Warblers fledge behind the Schlagle Library at Wyandotte County Lake Park.

Five of the warblers fledged from the known iron pipe nesting site in the lake. The male that nests in this pipe is very territorial, and our team of Master Naturalist monitors calls him "Warrior" for his aggressive defense of his territory. Our team photographer, Melissa Streczywilk, was onsite in 2022, when the nestlings fledged from the iron pipe, and she took amazing photos of the happy event. An additional 5 nestlings fledged from one of the wood nesting boxes our Master Naturalist team installed behind the library. Greg Lauber, the monitor for this nest, recorded data and made photos inside the box. We named the male Prothonotary Warbler who selected this nest site "Proton" (meaning first), because he and his mate were the first Prothonotary Warbler pair to nest in one of our boxes.

In 2023, we expanded the program to include 3 additional study sites in Johnson County. We now have 18 wooden nesting boxes and 8 PVC boxes in Johnson and Wyandotte Counties in Kansas. Even with the additional wood boxes, our results for 2023 were exactly the same as in 2022. In 2023, another five nestlings fledged from Proton's nesting box. Warrior, the Patriarch for the Wyandotte County Lake Prothonotary Warbler population, had another nest of warblers fledge from "his" iron pipe in June of 2023.

News of our Prothonotary Warbler pilot study traveled fast. I was contacted by a friend in early June about a Prothonotary Warbler pair nesting in a wren box at Wanda Heady's home in Linn County. This nesting box on Wanda's front porch of her house hosted 5 nestlings that fledged shortly thereafter. Wanda recorded this nesting experience with photos from her cell phone. Johnson, Wyandotte, and Linn County are all included in the territory for the Burroughs Audubon Society of the Greater Kansas City area.

Through social media I met Kathy Fox from Crawford County (Sperry-Galligar Audubon Society territory). Kathy shared photos and data from her bluebird nesting box with 4 eggs and 4 fledglings. Because Kathy and Wanda's nesting boxes were on their home property, they were able to share data on a daily basis with many photos of the heartwarming interactions between the parents and the nestlings. Data and photos from Wanda and Kathy's nest boxes have been reported to our Johnson County Master Naturalist Bluebird Stewards database and will be shared with the Cornell Laboratory of Ornithology NestWatch Database and with the Prothonotary Warbler Working Group Research Team.

Although the number of our nesting box successes has been limited, the nature and outreach from the work has been rewarding. I have given several presentations within the Kansas City area.

Birders and photographers visit
Wyandotte County Lake Park to watch
the birds, the nesting boxes, and Warrior's
iron pipe nest from a distance. These
observers communicate with our study
group often with updates from the field.

We regularly greet the fishermen who have favorite fishing spots behind the Schlagle Library. Two fishermen reached out on June 10 to report that they saw 2 babies fly with Warrior from the pipe on that day. Although monitors from our group did not witness this fledge, we believe Warrior likely had a nest of 5

babies, because this is the usual number of eggs in a Prothonotary Warbler nest. We have not had any follow-up second nesting attempts in the same season by these birds.

It is encouraging that the fishermen at Wyandotte County Lake have become interested in our nesting boxes. We share information with them and explain the importance of the fishing line disposal bins that are on-site throughout the park. One example is noteworthy. In 2022, our first year of the study, Greg Lauber, our nesting box monitor, found the Prothonotary Warblers had used braided fishing line to construct the nest inside the wood box. Greg went into action right away and surgically removed as much of the fishing line as he could from the nest to protect the future nestlings from entanglement in the line, which can strangle nestlings, cause deformities, maim or kill them. Fortunately, we did not have the fishing line problem this year. The Wyandotte County Park Grounds Team and I have noticed an increase this year in the amount of fishing line disposed in the bins behind Schlagle Library.

We believe the fishermen use the bins more often now because they have developed an affection and respect for the birds and other wildlife at the park.

Our Master Naturalist group now empties the bins and recycles the collected fishing line as a service to the park.

Birds of Kansas, the much-loved reference book authored in 2021 by Max Thompson, Charles Ely, Bob Gress, Chuck Otte, Sebastian Patti, David Seibel, and Eugene Young, records observations of warblers throughout eastern, central, and southwest Kansas, with breeding records in eastern counties. A search of Prothonotary Warbler sightings from eBird in Kansas from 2018-2023 includes sightings at Flint Hills National Wildlife Refuge, the Tuttle Creek Lake Area of Manhattan, Marais des Cygne National Wildlife Refuge, Hillsdale Lake near Paola, and Perry

Lake near Topeka. Expert birders report Prothonotary Warblers have been nesting near the Tuttle Creek Lake area near Manhattan for two decades or more. Reports of Prothonotary Warblers during nesting season are not limited to the far eastern side of Kansas. Reports in 2023 included sightings as far west as Chaplin Nature Center and Lower Grouse Creek in Cowley County near Arkansas City, at El Dorado State Park near Butler, Kansas, and Lakewood Park near Salina.

A heartwarming eBird report of a Prothonotary Warbler originated from Lakewood Park in Salina earlier in the spring of 2023. A birder there saw a Prothonotary Warbler early on his walk, but the bird was shy to the camera. The birder walked on and then came back to no bird. He offered a small prayer asking the Creator to allow a picture of this beauty. Within seconds, the gorgeous bird appeared and began singing for the birder. A beautiful photo of this Prothonotary Warbler is included in the eBird report.

Our study group has our own database, in which we record and monitor data from birds that nest in our boxes and other personal boxes from citizen scientists reporting to us from our area. We report our data to NestWatch from the Cornell Lab of Ornithology.

The Prothonotary Warbler Working Group is very interested in data from our area. There are few reports of Prothonotary Warblers nesting in the Midwest and little or no data on the spring and fall migratory paths for these birds. Future work includes the possibility of collaborating with Dr. Alice Boyle and her research group at Kansas State University to band and place transmitters on Prothonotary Warblers nesting in our area and perhaps provide in depth study data for the Prothonotary Warbler Working Group.

If individuals or groups are interested in setting up Prothonotary Warbler nesting boxes in other areas in eastern Kansas such as Marais des Cygnes in Linn County, Clinton Lake near Lawrence, Hillsdale Lake near Paola, or the Tuttle Lake area near Manhattan, please let us know. Our study group would be happy to share our learnings.