PARSONS: The Purple Martin Capital of Kansas

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Each spring the skies over Parsons, Kansas, are highlighted by the appearance of Purple Martins. Martins, known for their aerial acrobatics as well as their melodious burblings, have an unrivaled devotion to their home. Their devotion is so ingrained that near the first of March, they fly virtually non-stop from the Brazilian rainforest, where they winter, until they reach Parsons, all in a mere two weeks. Sometimes, they cross the whole of the Gulf of Mexico in a single day in their attempt to get home to begin the mating process.

At the end of that two-week, 3,500-mile journey of nearly non-stop flight, the Martin seeks out the exact nesting site where it raised its young the previous season. Much like the swallows of Capistrano, the Purple Martins of Parsons return to the same area they left the previous summer. But these nesting sites are not those of typical wild birds. The Martin has adapted its behavior so that it has become nearly fully reliant on humans to provide housing. East of the Rockies, it is rare to find Martins in a nesting site that is not man-made; their survival is thus totally dependent upon human action.

Purple Martin Capital of Kansas

The official record of Purple Martin houses on public property in Parsons began as early as 1969, when the city bought two Martin houses "to be placed in the city." Through the late '70s and '80s, the Southeast Kansas Audubon Society (SEK Audubon), led by project coordinator Bill Brewer, spearheaded the significant expansion of "public" Martin housing. In 1989, inspired by his love of Martins and motivated by other American towns' achieving similar designations, Brewer pushed for Parsons to become the official "Purple Martin Capital of Kansas." Quoted in the *Parsons Sun* in 1994, Brewer said, "I thought, heckfire, if they can get it done, we can get it done in Kansas ... it just happened that everything worked right, and it kept mushrooming from there."

In March of 1990 the Kansas Legislature voted 120-0 to name Parsons officially the "Purple Martin Capital of Kansas." This effort was led by Senator Mike Johnston and Representative Bill Brady, who supported the measure in Topeka, while wearing a purple jacket borrowed from a KSU fan. Then Governor Mike Hayden came to Parsons







Intimate views of Martin home life: eggs and nestlings at two stages of development. Photos by Andrew Burnett

"...That the Kansas Legislature proclaims Parsons, Kansas, as the Purple Martin Capital of Kansas"

(Senate Concurrent Resolution No. 1636, March 16, 1990)

to dedicate and raise the city's seventeenth public Martin house and to read the following proclamation: "Be it resolved by the Senate of the State of Kansas, the House of Representatives concurring therein: That the Kansas Legislature proclaims Parsons, Kansas, as the Purple Martin Capital of Kansas" (Senate Concurrent Resolution No. 1636, March 16, 1990).

The Martin population thrived for a decade, following this state declaration, with the Martins always delighting many residents and visitors. The bird houses continued to be put up and cared for by members of SEK Audubon, reaching a peak in 1999 with seventy-seven houses and an estimated population of 1,000 adult Purple Martins.

This began to change in May 2000, however, when a tornado struck Parsons. The tornado, while small in relative terms, hit the heart of the public Purple Martin colony. Many of the houses were destroyed or damaged, and tragically, many Martins were killed or disappeared from the colony. In addition, shortly afte wards, the primary driver of the Martin project, Bill Brewer, passed away. These factors combined to cause an overall decline in Parsons' Purple Martin population.

Moreover, the European Starling and the English House Sparrow, invasive bird species, contributed greatly to the decline of the Martins in Parsons. Introduced by humans to North America in the late nineteenth century, these species have multiplied to the point that they have become a serious problem to all native, cavity-nesting birds. Both preempt potential nesting locations for Martins, and both have been known to raid Martin nests in an effort to steal these nests for their own. They also have the evolutionary advantage of strong pointed bills and an aggres-

sive nature. There is little the Martins and other native birds can do to stop the onslaught. At the time of a formal population survey in May of 2013, the public Purple Martin colony population had fallen to forty pairs—a 90% population loss from the 1999 peak.

Advancement in Purple Martin Management

The survey was a call to action for the SEK Audubon Society. There was a clear risk of losing the Purple Martins. Partnering with the Purple Martin Conservation Association (PMCA), SEK Audubon developed a new set of criteria for housing design and management. The PMCA provided years of experience, science and knowledge on which SEK Audubon could build. The new criteria are:

Expanded Housing Compartment Size: The standard six-inch by six-inch compartment, while functional, does not promote Martin wellbeing. Weather and predators both compromise this size very easily. Doubling the size to six-inch by twelve-inch has proven to increase overall house occupancy as well as increased brood size. Expanded compartments also keep nests drier and allow nestlings to stay cooler during heat waves.

Starling Resistant Entry Hole (SREH): Starlings are direct competitors for Martin nesting sites. If a Starling wants a nest cavity, the Martin is all but powerless to stop it. SREHs are designed to prevent the larger Starling from entering potential Martin housing by changing the opening size to the house and its position.

Porch Dividers: Porch dividers keep male Martins from dominating more than one nesting cavity, allowing for more productive use of housing. Dividers also prevent nestlings from moving from one nest to another. Such

movement potentially can cause the young to die.

Predator Baffles Similar to squirrel baffl , these devices prevent most snakes, squirrels, and raccoons from climbing a pole and raiding a nest.

Location: Several Martin houses, over the years, had become unsuitable for Martins, due to the growth of nearby trees. If a tree gets too close to a house, Martins feel unsafe and abandon the location.

Management: It is necessary to consistently prevent invasive species from occupying housing; to monitor Martin arrival and not open housing until the Martins arrive; to clean and close housing after artins have migrated; and to conduct regular nest checks to ensure status of Martins.

Repair and Upgrade

Based upon the new criteria, an assessment of Parsons' Purple Martin colony was made. The assessment showed that approximately \$10,000 was needed to repair, replace, and upgrade all of the forty aluminum Martin houses and poles set up for the current public colony. The fact that Parsons had been designated as the "Purple Martin Capital of Kansas" gave our community a great advantage. While most communities might struggle to identify a Purple Martin, the vast majority of Parsons residents know that Parsons is the Kansas Purple Martin capital.

SEK Audubon then approached Jim Zaleski, the CEO of the Parsons Chamber of Commerce, and the Labette County Tourism Board for help. Jim enthusiastically embraced the project. Labette County Tourism granted the project \$300 as well as assisted with marketing, in an effort to kickstart the program. The campaign quickly raised several thousand dollars from individuals and businesses. Grants were received from the National Audubon Society and Purple Martin Conservation Asso-



Photo by Andrew Burnett

ciation. These funds were then leveraged to apply for a grant from the Kansas Department of Wildlife, Parks and Tourism's "Chickadee Checkoff" program. Taxpayers can voluntarily check off on their ansas tax forms a contribution for non-game wildlife conservation. We were elated when we received notice that we were awarded the maximum allowable amount of \$5,000. Our project was nearly fully funded! The city of Parsons then chipped in, providing us an unused work and storage space that had been previously allocated for new business development.

Over the course of the fall and winter of 2013, SEK Audubon members steadily worked through the process of rebuilding the Purple Martin colony. Old houses were repaired, new poles installed, houses relocated, new systems installed. Overall about 70 percent of the needed work was completed in time for the March 2014 arrival of the Martins. The Purple Martins enthusiastically adopted the new design. The public colony grew from forty nesting pairs in 2013 to sixty–two in 2014, including one pair becoming established in a colony section that had been abandoned for at least five years.

While the gains were tenuous, it was a wonderful start for the rebirth of the Purple Martin Capital. The remaining 30 percent of the renovation work was completed prior to the 2015 arrival of the Martins. The colony ended up with 280 potential nesting cavities once renovations were completed. In the years since, the Purple Martins have responded wonderfully. Population increases have been recorded each season: 2015-120 pairs, 2016-184 pairs, 2017-214 pairs. If trends continue, the public colony should near its peak capacity during the 2019 season. Although Parsons does not have nearly the 1,000 cavities that it had at its peak owing to the impact of the new design features in the houses, the total number of young Martins produced each season since 2000 should bring us up to the same number as we had during the peak. The Parsons Purple Martin colony will also be easier to maintain and more resistant to radical shifts in p pulation.

Long term, our plan is to create a billboard-style learning station for the public to visit and learn about Purple Martins and their biology. We also plan to engage local schools with age-appropriate educational and hands-on learning opportunities. Our hope is to continue to build on the Purple Martin legacy in Parsons as well as to engage the next generation in the wonders of avian ecology.

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