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## CACTUS WREN NEST CHARACTERISTICS IN SOUTH TEXAS

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The Cactus Wren (*Campylorhynchus brunneicapillus*) is a resident of the western portion of Texas and is common in the deserts of the southwestern United States to central Mexico (Ricklefs and Hainsworth 1968, Anderson and Anderson 1973). They are known to occupy very dry habitats generally dominated by cacti as their name suggests. Nest building and placement by Cactus Wrens has been well documented in Arizona from the 1920s through the 1980s (Bailey 1922, Anderson and Anderson 1957, Austin 1973, Facemire et al. 1990). However, Cactus Wren behavior in Texas and the rest of their range (Marr and Raitt 1983) has not been a focus of recent literature. Considering the arid landscape of South Texas is prime habitat for this species, this warrants additional focus on the Cactus Wren.

This note shares documentation of three Cactus Wren nests found on the East Foundation's San Antonio Viejo Ranch. The ranch is located W of Hebbronville and N of Guerra within Jim Hogg and Starr Counties. The nests described here are assumed to be roosting nests based on the time of the year they were observed being constructed. A roosting nest for this species is a nightly dwelling for an individual during the non-breeding season. Nest placement by the Cactus Wren can be problematic because it involves the consideration of various factors that may affect their present and future status. A Cactus Wren must avoid impaling itself on the protective thorns of the plants in which it chooses to create its nest, yet place the nest in an

accessible area that is well protected from predators and weather.

During non-breeding bird surveys on 04 November 2016 at 0800 CST, sightings of three Cactus Wrens prompted us to observe as one was in the process of constructing a nest. This individual was carrying dried grass to the nest seen in Figure 1. Since 2010, these surveys have never captured such active Cactus Wrens (more than 20 recorded that day), particularly for the month of November in which they are considered dormant or inactive (Anderson and Anderson 1957). This individual was in the process of building a roosting nest in a prickly pear cactus (*Opuntia engelmannii*) surrounded by Texas persimmon (*Diospyros texana*) to the N, and tasajillo (*Cylindropuntia leptocaulis*), honey mesquite (*Prosopis glandulosa*), and Spanish dagger (*Yucca treculeana*) to the S. The nest, globular in shape (Figs. 1-2), had an entrance approximately 4 cm in diameter facing E and was approximately 30.5 cm long, 23 cm wide, 18 cm high, and 1.42 m from the ground.

Nest size and shape agreed with previous literature from Arizona (Bailey 1922, Anderson and Anderson 1957) and placement appears to be similar, as well, with nest locations documented in vegetation of the same family Cactaceae. However, we noted differences in the placement choice and lifespan of the nests surrounded by the structural diversity of vegetation, particularly those with thorns, in comparison to those that were placed in similar vegetation but with little to no protection

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Figure 1. Front view of Cactus Wren nest placed in prickly pear cactus surrounded by Texas persimmon, tasajillo, honey mesquite, and Spanish dagger.

from surrounding vegetation. A second nest, 178 m N from the nest of Figure 1, was noted the same day and found a month later (12 December 2016) partially destroyed exposing the interior of the nest which contained down feathers (Fig. 3). The exterior of the nest was primarily made of lovegrass (*Eragrostis* spp.), similar to others observed on this ranch. This second nest was placed in prickly pear but not surrounded by any protective vegetation. The nearest vegetation was a small tasajillo about 0.5 m to the SW of the prickly pear in which the nest was placed (Fig. 4). Again, the entrance was facing E, and the nest was approximately 20 cm long, 14 cm wide, 13 cm high, and 1.4 m from the ground. Because the nest was placed in a location with very little protection, it is possible that inclement weather received at the ranch in the month prior to these observations may have torn the nest open. A predator or competitor, such as the Curve-billed or Long-billed Thrasher (*Toxostoma curvirostre* and *Toxostoma longirostre*, respectively), both residents of the ranch, may have also taken advantage of easily accessible nest materials (Anderson and Anderson 1957).



Figure 2. Side view of Cactus Wren nest placed in prickly pear cactus.



Figure 3. Entrance to destroyed Cactus Wren nest lined with down feathers. Missing top portion can be seen in photo as this nest was placed in a prickly pear cactus that lacked surrounding protective vegetation.



Figure 4. Destroyed Cactus Wren nest in prickly pear cactus.



Figure 5. Cactus Wren nest placed in honey mesquite surrounded by tasajillo, granjeno, honey mesquite, and lime prickly ash.

A third nest was found 34 m E of the second nest and was wedged between the branches of a honey mesquite (Fig. 5). It was surrounded by tasajillo to the E and granjeno (*Celtis pallida*), honey mesquite, and lime prickly ash (*Zanthoxylum fagara*) to the S. The entrance to this nest was placed facing NW and was approximately 38 cm long, 13 cm wide, 13 cm high, and 1.4 m off of the ground. Considering the different entrance direction and vegetation use, the nest appeared to remain intact and possibly still in use based on changes in its appearance (i.e., fresh grass added to entrance and back of nest). Other Cactus Wren nests were observed throughout our surveys, all placed within the same vegetation community types with the exception of one within lime prickly ash. A majority of nests noted on this ranch were placed in prickly pear cactus of genus *Opuntia*, different from Zimmerman (1957) who did

not observe any nests of the Yucatán Cactus Wren (*C. yucatanicus*) in *Opuntia* spp. and Anderson and Anderson (1957) and Facemire et al. (1990) who report cholla cactus (i.e., tasajillo) of genus *Cylindropuntia* (formerly *Opuntia*, Pinkava 1999) as primary nest locations—vegetation available in South Texas but not selected for primary nest placement on this ranch based on our observations.

The nests we observed show similarity between Cactus Wren behavior in South Texas and other locations within its range. Although habitat and environmental conditions may be slightly different from one location to another, Cactus Wrens appear to maintain a comparable routine as far as nest placement and vegetation selection based on our observations reported here. It appears that nests surrounded by high amounts of thorny vegetation have prolonged life and sustained usage because

of the protection the vegetation provides. While nest descriptions appear to be similar to existing literature, there may be other aspects of Cactus Wren behavior (e.g., mate selection, territories, diet) worth investigating in other parts of its range. The burst of activity and abundance observed here is uncommon during the winter and calls for more attention to the species.

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## EDGAR BYRAN KINCAID, JR. AKA CASSOWARY “FATHER OF TEXAS BIRDING”

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Edgar Bryan Kincaid, Jr. ornithologist, was born in San Antonio, Texas, on 30 December 1921, the son of Edgar Bryan and Lucille (McKee) Kincaid. He grew up on the family's ranch in Uvalde County and moved to Austin in 1939 to live with his aunt and uncle, Bertha McKee and J. Frank Dobie, a famous Texas folklorist. Kincaid studied zoology, botany, and history at the University of Texas and graduated in 1943 with a bachelors degree in Botany.

According to Winkler (1986) he loved to tell the story of how, at about age six, he first laid eyes on a meadowlark on the cover of Burgess Bird Book for Children in a Joske's department store in San Antonio, and how he begged his mother (he claimed he threw a tantrum) to buy it for him. Ultimately it would be the first in a collection that grew to

more than 1,000 volumes, now housed at Texas A&M University. Subsequently, yellow (the shade of the meadowlark's breast) was his favorite color. He displayed it often in the form of stocking caps, neckties, and socks. Also according to Suzanne Winkler (2008)

“He was a lonely prophet, forecasting the decline of many bird species well before academically trained ornithologists would amass the data to prove his point. Many of his predictions can be read in *The Bird Life of Texas*, published in 1974 by the University of Texas Press. The treatise, originally written by Henry Church Oberholser in the early 20th century, was edited over a 14-year period by Kincaid and various helpers, of whom [Susan Winkler] was one. Because he foresaw a

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