

## PREDATION OF HOUSE FINCH EGGS BY CACTUS WREN

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**ABSTRACT:** Although the Cactus Wren (*Campylorhynchus brunneicapillus*), like some other wrens, is well known for destroying other birds' eggs, it has not been reported eating those eggs. We observed an incident of a Cactus Wren consuming the contents of an egg it took from a House Finch (*Haemorhous mexicanus*) nest ~25 km southeast of La Paz, Baja California Sur, Mexico.

The Cactus Wren (*Campylorhynchus brunneicapillus*) is adapted to arid environments in the southwestern United States and northwestern Mexico (Hamilton et al. 2020). It is closely associated, though not exclusively, with cacti such as chollas (*Cylindropuntia* spp.), where it builds its nests, although there are numerous examples of it nesting on other substrates (ibid.). For instance, in the southernmost part of the Baja California peninsula, subspecies *affinis* often nests in palms (*Washingtonia robusta* and *Brahea brandegeei*, pers. obs.).

The diet of the Cactus Wren is predominantly invertebrates such as insects and spiders, though the birds also consume fruits, seeds, and occasionally small vertebrates (Hamilton et al. 2020). This diet varies considerably by region, but it is generally composed mostly of animal matter (Beal 1907).

The Cactus Wren is highly territorial, even from an early age, and aggression is commonly observed both within and between species (Anderson and Anderson 1973). Such territorial behaviors include destruction of nests and removal or breaking of eggs. Aggression has been documented against species such as the Verdin (*Auriparus flaviceps*), House Finch (*Haemorhous mexicanus*), and House Sparrow (*Passer domesticus*), among others (ibid.). Until now, however, the Cactus Wren has not been reported consuming other species' eggs. Here, we document a case of egg predation by a Cactus Wren on House Finch eggs.

The observation took place on 3 July 2024 in the sub-basin of Los Planes, in the municipality of La Paz, Baja California Sur, at an elevation of 650 m in the transition zone between tropical xeric scrubland and deciduous dry forest (González-Abraham et al. 2010). At the site, a palapa (a palm-thatched shade structure with open sides) measuring no more than 10 m on a side hosted nests of the Hooded Oriole (*Icterus cucullatus*), Scott's Oriole (*I. parisorum*), House Finch, Common Ground Dove (*Columbina passerina*), and White-winged Dove (*Zenaidra asiatica*). A pair of House Finches initially nested in an old Hooded Oriole nest and later built a new nest above it. Surrounding vegetation included species typical of deciduous dry forests of the Cape region of Baja California Sur, such as *Pachycereus pringlei*, *P. pecten-aboriginum*, *Lysiloma divaricatum*, *Esenbeckia flava*, *Nahuatlea arborescens*, *Cylindropuntia cholla*, and *Jatropha cinerea*. Other bird species nesting near the palapa included the Cactus Wren, Black-throated Sparrow (*Amphispiza bilineata*), Blue-gray Gnatcatcher (*Polioptila caerulea*), California Gnatcatcher (*P. californica*), and Ash-throated Flycatcher (*Myiarchus cinerascens*).

## NOTES

At approximately 10:00, a Cactus Wren approached the palapa and perched on an unattended House Finch nest. The wren inspected the nest, took an egg, and transported it four meters away, where it broke the egg and consumed its contents. Shortly thereafter, the parent finches returned to the nest, prompting the Cactus Wren to flee to the nearby scrub. A few minutes later, presumably the same Cactus Wren approached a Scott's Oriole nest also located on the palapa, but any interaction could not be observed because of the nest's position.

Egg destruction by the Cactus Wren has been previously documented but not egg consumption. For instance, in an experiment with Japanese Quail (*Coturnix japonica*) eggs, Cactus Wrens attacked 18 of 71 nests and destroyed but did not consume the eggs (Simons and Simons 1990). This behavior is associated with territoriality and typically occurs at nests located at a distance from the wrens' own nests, likely to avoid retaliation.

Within the family Troglodytidae, several other species, including the Marsh Wren (*Cistothorus palustris*), Sedge Wren (*C. stellaris*), Northern House Wren (*Troglodytes aedon*), Bewick's Wren (*Thryomanes bewickii*), and Rufous-and-white Wren (*Thryophilus rufalbus*), have been reported to destroy the eggs in the nests of other species, but without consuming them (Simons and Simons 1990).

In the case of the Bicolored Wren (*C. griseus*)—commonly known in Spanish as the “cucarachero chupahuevos,” or the “egg-sucking cockroach-eater”—it is popularly said to consume chicken eggs in coops, a behavior also observed in the Giant Wren (*C. chiapensis*; Kroodsma and Brewer 2020a, b). Though these claims lack any supporting evidence (ibid.), they do suggest that oophagy might be more widespread within the genus *Campylorhynchus* than previously thought.

The high concentration of birds nesting in the palapa's palm thatch—at least four pairs of House Finches as well as the other species nesting simultaneously—likely attracted egg predators. Also, Baja California Sur is one of the most arid regions in Mexico, with average annual rainfall in deciduous dry forests barely exceeding 300 mm (González-Abraham et al. 2010). The scarcity of resources in such environments could drive opportunistic behaviors such as oophagy. Additionally, the Sonoran Desert experienced its most severe drought since 1980 in 2020 and 2021, resulting in significant mortality of the plant community in the Cape region and elsewhere (Wilder et al. 2025). It would be interesting to investigate the Cactus Wren's frequency as an egg predator in even more arid areas, such as the Altar Desert in Sonora.

Likewise, just as the nesting habits of the Cactus Wren in the Cape region vary (pers. obs.), its diet could also differ significantly. Further studies are necessary to understand how the unique environmental conditions and isolation of the Baja California peninsula influence the feeding and territorial behaviors of this species, and whether these variations are linked to phylogenetic differences between peninsular and mainland populations or stimulated by scarcity.

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