CACTUS WREN CONDOS:  
DOES URBANIZATION AFFECT THE CHARACTERISTICS OF CACTUS WREN ROOST NESTS?  
A Preliminary Investigation  
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Cactus Wrens (Campylorhynchus brunneicapillus) are a common bird native to the Sonoran desert, and are also quite successful in the urban environment. A characteristic behavior of Cactus Wrens is that they build and maintain roost nests in the winter (in addition to summer breeding nests), presumably to help with nocturnal thermoregulation. This was a preliminary investigation to determine if Cactus Wren roost nests serve to maintain an internal microclimate for thermoregulatory benefits. Roost nests in urban habitat are expected to be similar to those in natural habitat in terms of internal microclimate. On the other hand, nest site habitat characteristics in urban areas will be significantly different from those in undisturbed desert habitat. Two groups of active nests were examined: one located in undisturbed desert habitat and the other in urban habitat. Roost nest internal temperature, site characteristics and nest habitat characteristics were measured. Further investigation is planned to examine the hypothesis that urban habitats may have an effect upon the behavior and adaptation of resident nesting birds.

This pair of graphs shows internal nest temp. compared with the ambient temp. The first graph indicates a Cactus Wren in its roost nest. The second graph indicated no apparent Wren activity in the nest.

Future efforts will use methods refined in this investigation. Key goals are increase sample size, improve randomness of sample and refine what type of information is needed from each nest.