

# Thermal Adaptions of the Carolina Wren

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The Carolina or Mocking Wren (*Thryothorus ludovicianus*), always abundant in the south, has been slowly extending its range northward. This feat involved adjusting to longer and colder winters and springs (Bent 1948; Laskey 1948). Its response has involved the building of bigger and better nests as well as the utilization of man-made shelters. In the south, by contrast, it has been reported to be a shy and retiring bird and its nests are most frequently open except in very exposed places.

Over the years this little bird with the enormous voice has nested four times over the window sill of the alcove to my back door, three times in the near-by wood shed, three times in my garage, and once in a flower box on my window sill. It entered the garage through a tiny break in the glass in one of the windows.

The composition of seven nests collected over a three-year period is summarized in Table 1. One first nest was built in the spot occupied by a second nest the previous year. A difference in size of the nest with season persisted throughout the three-year period. The size and content of the nests built in April, May, and June is shown in Table 1. The first nests averaged about 64 grams in weight; the second, less than half that weight. All of the nests had the opening at one end (see Figure 1). It took the wrens close to 700 trips to build the first two nests; only about 100 for the third. Considerably lighter and smaller materials were used in the construction of the last two nests. The lone third nest was never used.

Perhaps additional nesting materials are added in the early season until the temperature holds. Nolan, 1978, reports that the Prairie Warbler adapts its nest size to seasonal temperature changes. The larger nests are frequently used as sleeping quarters on cold summer nights and in the winter (Bent 1948, Laskey 1948). The wrens also frequently use old hornet nests for sleeping in cold weather. A hornet nest placed three feet from my front window was repeatedly investigated inside and out by the wrens. The wrens seldom looked into the opening of a paper-covered (30x30x30 cm.) insulated nest box placed immediately below the hornet nest. How do you make a nest look like a hornet's nest to a wren?

## Literature Cited

- Bent, A. C. 1948. Life Histories of North American Nuthatches, Wrens, Thrashers and their Allies. Dover Press. p. 1064.  
Laskey, A. R. 1948. Some nesting data on the Carolina Wren at Nashville, Tennessee. *Bird-Banding* 19(3):101-121.  
Nolan, V. Jr. 1978. The Ecology and Behavior of the Prairie Warbler, *Dendroica discolor*. Ornithological Monographs No. 26. American Ornithologists Union.

Table 1. Comparison of Nests of Carolina Wrens.

DESCRIPTION	APRIL	MAY	JUNE
Avg. Size (cm.)	15x23	10x13	8x8
Avg. Weight (grams)	64	28	14
<b>Materials Used</b>			
Bark strips (long)	40		
Bark strips (short)	105	20	1
Grass with roots	125	0	0
Light straw	55	0	20
Leaves	80	65	10
Leaf fragments			45
Sticks	5	0	1
Pine needles	55	65	0
Wool clumps	2	0	2
Fine grass (mouthfull)	175	525	45
Maple keys	0	10	0
<b>Total Number of Trips</b>	<b>662</b>	<b>689</b>	<b>112</b>

