

# A Population Collapse in the House Wren – or is there one?

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On the 15-acre former summer home of Dr. S. Prentiss Baldwin in Gates Mills, just east of Cleveland, in northern Ohio, nearly all nesting House Wrens, *Troglodytes aedon*, were trapped and banded between 1918 and 1939, and a reliable population estimate was obtained for 1940. The total population normally varied between 20 and 25 birds with a high of 29 in 1937 and exceptional lows of 10 in 1926 and 6 in 1940. These two lows coincided with reduced populations over much of eastern North America and, along with lesser low populations in 1924, 1931, and 1936, correlated well with mean temperatures in the wintering range of the species dropping below 55°F. (13°C.) (Kendeigh, S. C., Measurement of bird populations, *Ecol. Mono.* 14, 1944: 67-106).

The record of breeding populations in northern Ohio terminated in 1940 but is continued in the breeding bird censuses for Trelease Woods, 6 miles northeast of Urbana, Illinois, being reported in *American Birds*. The population was low in 1940 but then increased to 61 territorial males in 1949, which made the House Wren the most abundant species in this 55-acre woods. There has been a general decline since that time, until this past summer, when

only 5 males were present. Sharp declines in population size in 1951 and 1958 are correlated with low temperatures on the wintering range, and there has been a general decline in winter temperatures during the last 20 years.

Before attempting a more detailed analysis of the cause of annual fluctuations in the abundance of the species, I would like to know whether the relative changes in numbers from year to year as measured in Trelease Woods actually do reflect changes in the population of the species generally over the whole or a substantial portion of its range.

I would welcome correspondence from observers over the country concerning this bird. Has there been a general collapse in the population of the House Wren? Over how many years has this decline in numbers been evident? When did the species previously reach its greatest abundance? Can you suggest any reasons for its fluctuations in numbers? Can you document your answer to these questions with actual population data?

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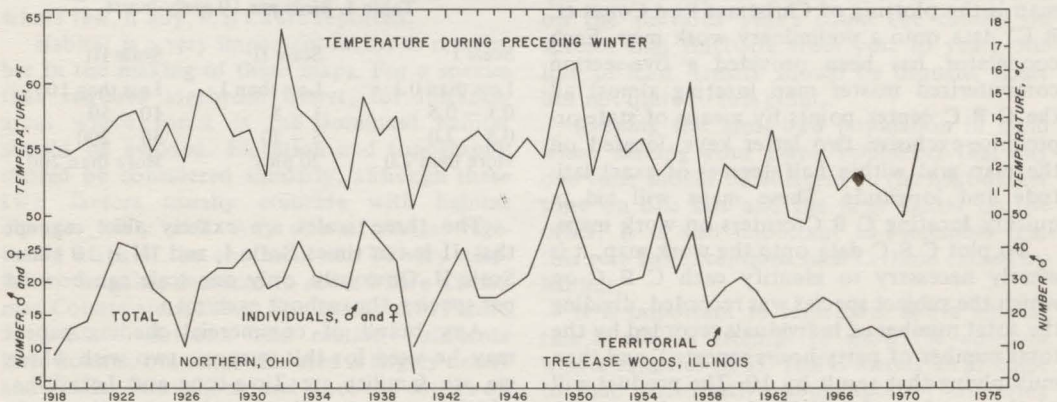


Figure 1. Annual fluctuations in the nesting population of the House Wren and in the mean temperature the preceding winter (average of mean monthly temperatures for December, January, and February at Tampa and Jacksonville, Florida; Savannah, Georgia; and Montgomery and Mobile, Alabama).