GENERAL NOTES

A wren singing combined House and Carolina Wren songs.—Although the House Wren (*Troglodytes aëdon*) is both a familiar and intensively studied species, there is little or no reported evidence of its engaging in vocal mimicry. The repeated utterance of songs of both House and Carolina Wrens (*Thryothorus ludovicianus*) by a singer apparently belonging to the former species is therefore of interest. The incidents occurred at Bloomington, Indiana, in a suburban yard next to a large undeveloped tract; both House and Carolina Wrens were breeding commonly in the immediate area. The first of the songs was heard on 10 May 1959, at 10 AM. House Wrens had returned to Bloomington on about 18 April, and I had passed the particular spot repeatedly since that date without remarking anything unusual.

During about ten minutes spent within earshot, I heard 30 loud songs, only one of them an unembellished, normal House Wren performance. In all the others a House Wren song, possibly of slightly reduced length, was immediately followed by one, two, or three identical descending Carolina phrases. The one-phrase utterances outnumbered the combined total of the others by at least two to one. The singer was perched in and moving through a tree beside a house; a nest box hung at about ten feet, and most songs were sung at approximately this height.

On my next visit, at 5 PM on 12 May, only typical House Wren songs were heard for several minutes. Then came five combinations, each consisting of a series of three or four Carolina phrases like those heard on 10 May, each series succeeded without pause by a normal House Wren song. It will be noted that many full Carolina Wren songs contain only three or four phrases (Borror, 1956. Auk, 73:211-229). Indeed, as I listened to the singer I could also hear the songs of House and Carolina Wrens from several points nearby, and I could detect no differences between these "pure" performances and their respective counterparts in the double vocalizations described. I heard no more combination songs at this time or later, although I passed the yard often during the summer. The wren house in the tree seemed never to be occupied.

A possible connection between the extraneous Carolina notes and a characteristic element of some House Wren songs is suggested by the observations of Kendeigh on the latter bird (1941. *Ill. Biol. Monog.*, 18(3):20). "The song often begins with churring, guttural or sharp staccato notes or squeaks differing from the main body," and the same sounds are sometimes appended as a sort of suffix. While the Carolina phrases described herein may thus be an elaboration of a usually formless part sometimes added to the typical song, this explanation does not account for their imitative effect.

Vocal mimicry in the Troglodytidae is summed up by Armstrong (1955. The Wren, p. 84) with the statement that "as a group [wrens] seem little prone to add to their repertoire by imitation." Saunders (1929. N.Y. State Mus. Handbook, 7:31-32) tells of a House Wren lacking all normal song, but although several of its performances suggested those of other species, none did so "clearly enough as to make me think them imitations." In contrast, both the Carolina Wren (Bent, 1948. U.S. Natl. Mus. Bull., 195:211-213; McAtee, 1950. Wilson Bull., 62:136) and Bewick's Wren (Thryomanes bewickii) (Howell and Oldys, 1907. Auk, 24:149-153) have been regarded as good mimics.

A striking parallel with the present case is Thomas' (1943. *Wilson Bull.*, 55:192-193) report of a wren singing Bewick's and House songs in brief alternate series. This bird appeared to be a typical Bewick's except that its tail may have been shorter than average and was flirted less freely, and Thomas presents the possibility that the singer was a hybrid rather than a Bewick's Wren with an acquired second song. In this connection it

is interesting that both the wrens heard by Thomas and by me were rendering faithful reproductions of the songs of closely related forms, and it may be relevant too to note that Armstrong (op. cit.) believes that the Winter Wren (*Troglodytes troglodytes*) does not learn its song but can perform it without having heard others of its species. On the other hand, probably the best argument for caution in explaining a bivalent repertory by assuming hybridization is presented by Lanyon's study of sympatric Eastern and Western Meadowlarks (*Sturnella magna* and *S. neglecta*) (1957. *Publ. Nuttall Orn. Club*, 1:1–67). Although there have been a number of cases of individual meadowlarks with both Eastern and Western songs, Lanyon found that males learn their songs and sometimes those of the other species, and he concluded that there is no clear instance of hybridization in the wild.—VAL NOLAN, JR., *Indiana University, Bloomington, Indiana, 4 December 1959*.

House Wrens and Bewick's Wrens in Northern Ohio.—In the spring and summer of 1957 I observed the nesting of a pair of Bewick's Wrens (*Thryomanes bewickii*) in Pepper Pike Village (Cleveland), Cuyahoga County, Ohio. This in itself was a rare and noteworthy occurrence, but even more noteworthy was the fact that the Bewick's Wrens occupied a nesting territory directly adjoining the nesting territory of a pair of House Wrens (*Troglodytes aëdon*).

Sutton (1930. Wilson Bull., 42:13), writing of the nesting wrens of Brooke County, West Virginia, concludes that "the House Wren and Carolina Wren may inhabit precisely the same region without friction; but the House Wren and Bewick's Wren, or the Bewick's Wren and Carolina Wren, evidently do not." Referring to the Bewick's Wren and the House Wren in the vicinity of Johnson City, Tennessee, Tyler and Lyle (1947. The Migrant, 18:28-29) state that "when these two wrens meet, they fight to the death." Pough (1946. Audubon Bird Guide, Eastern Land Birds, p. 100) asserts that, "In parts of the Midwest this species [Bewick's Wren] appears to be extending its range northward at the expense of the house wren. Neither will tolerate the other on its breeding territory."

On the afternoon of 21 April 1957, I discovered the male Bewick's Wren in a scrub field area in Pepper Pike Village and observed it for several hours during which time it sang repeatedly. At first it seemed to be wandering about over the field, stopping to sing in the few scattered trees, but later in the afternoon it kept to a small, abandoned orchard at one side of the field. I did not return to the area until 4 May, when I found a pair of Bewick's Wrens in the orchard. They were there on 5 May as well, but on neither day did I hear the male singing.

On the evening of 6 May, I again visited the orchard, finding both Bewick's Wrens there. At about 7:30 PM, for the first time I heard a House Wren in the orchard. Shortly thereafter the male Bewick's Wren and the House Wren began to fight—chasing each other in short flights through the tangled branches of several fallen apple trees in the center of the orchard or occasionally ascending into the crowns of standing trees. Then for some three to four minutes the disputants separated, the House Wren all the while keeping up a vehement scolding. Following this interlude the two birds resumed their fighting which quickly reached its peak of intensity. The scene of this encounter was the dense leafy crown of a fallen apple tree; thus my view of the birds was largely obscured. Occasionally, however, I caught glimpses of them when they flew down among the tussocks of grass beneath the tree, and it seemed that they were actually in physical contact at those times. Throughout the fighting, which lasted for 10 to 12 minutes with only momentary pauses, both birds kept up a furious outcry. One of them (which one I could not determine) uttered a strange squealing note. At the conclusion of these separate encounters, or sometimes just before the close, the Bewick's Wren would often break into song but would