

Wren Marriages Are Very "Modern"

Ornithology

BY MARJORIE MACDILL

Jenny Wren, the perky little terma-gant now setting up housekeeping in a thousand dooryards, is not the model of domestic virtue she has always been supposed to be.

The X-ray eye of modern science, that strips cherished illusions off almost everything, has penetrated the privacy of Jenny's matrimonial affairs and revealed that she is—rather fickle.

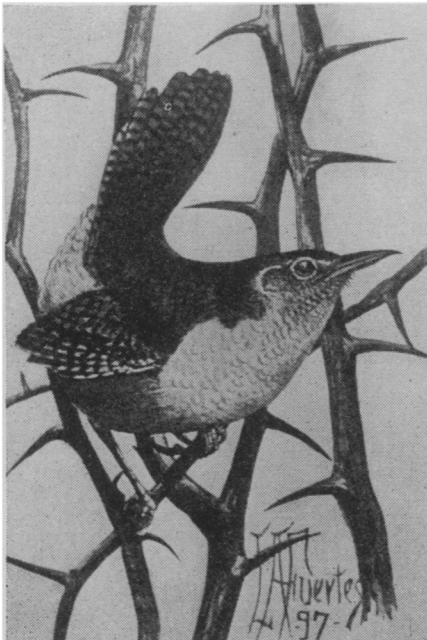
S. Prentiss Baldwin, of Cleveland, Ohio, one of the leaders in the development of bird banding in this country, has devoted the last twelve years to an intensive study of the house wren, that has left little about the life of the fresh little scold of the bird world to the imagination, from egg to parenthood.

Mr. Baldwin first took up the study of birds as a pleasant avocation but eventually became so interested in the affairs of wren-dom that he now devotes all his time to them. As a result the Baldwin Bird Research Laboratory, about ten miles out of Cleveland, is one of the most unique and completely equipped places for the study of birds in existence.

Most bird lovers have the idea that the twittering couple who have recently taken possession of the neat box on the back yard fence are the same devoted ones who lived there last year. Mr. Baldwin's voluminous records, however, show that this pretty fallacy, as far as the house wren is concerned, has gone the way of most sentimental notions these matter-of-fact days. Wrens are ultra-modern in their domestic arrangements. In fact, Jenny Wren believes in divorce.

She not only changes her mate from season to season, but frequently raises one brood in the spring with one husband and another brood of nestlings later in the season with another. The deserted mate promptly consoles himself and philosophically sets about raising a second brood with a new helpmate. Sometimes Father Wren is the faithless one, leaving his wife to raise her brood as best she can alone. In any case individual heart throbs are not allowed to interfere with the serious business of raising a family.

This new light on the private life of wrens is based on the recapture and close personal observation of many individual banded birds. The rematings in wren families make it



THE HOUSE WREN is a devoted parent, but a very fickle spouse

Painting by L. A. Fuertes. © by Mabel Osgood Wright.

difficult to keep track of the family relationships. In three generations the services of a trained genealogist would be needed to tell which was whose uncle among the wrens in one limited locality.

The males arrive first at Hillcrest Farm, where the Bird Research Laboratory is situated. Each locates what he considers a satisfactory nesting box into which he starts dragging sticks, the preliminary makings of a nest. Here he takes up his stand, guarding the box against all rivals and lifting up his vociferous wrennish voice in well-nigh perpetual song. The females arrive a little later, look the ground over, and, like the more hard-boiled of their human sisters, have a sharper eye out for the material comforts the potential mate can offer than they have for the bird himself. For close observations have shown that the structure of the nest box and its location really arouses more interest in many females than the personal attractions of the mere male that goes with it.

In commenting on the "choosiness" of Jenny Wren in selecting her establishment, Mr. Baldwin relates the following instance of feminine bargain hunting in homes and husbands:

"For two or three weeks a male occupied a nesting box, No. 53, on the outside wall of the library at Hill-

crest. One morning he sang with unusual vigor and showed great excitement. A female was examining his nest box. At 7 A. M. the trap-door of the box was closed and the band on the leg of the captured female was read.

"Four hours later, when the observer was passing nest box No. 47, attached to the walls of the garage, its male proprietor showed similar excitement over a female that was going in and out of the box and otherwise indicating that she was inspecting the premises. She was trapped and her band proved her to be the same bird noted earlier in the morning at box 53.

"At 4 P. M. on the same day she was caught at nest box 49, half way between the other boxes, where she was examining the premises held by a third male. By the next morning she had settled down contentedly and began her honeymoon with male number four (!) at box 26, attached to the outer walls of the sugar house. This was the final choice and there she raised her family."

Bird banding, the nation-wide practice which is just beginning to reveal to science some of the age-old secrets of bird migration, is the prop on which Mr. Baldwin and his assistants lean most heavily for their information about the private life of the wren. For one wren resembles another in looks, though not in character the wren student will tell you, as much as two peas in a pod. Father and Mother Wren look so much alike that not even a trained ornithologist can tell the sex of a wren held in his hand without recourse to dissection.

Two assistants, experienced ornithologists, assist Mr. Baldwin in banding and checking up on the hundreds of wrens at Hillcrest Farm. It is their job to keep all the numbered nest boxes and their inmates on a certain restricted area of the hundred-acre farm under observation from four o'clock in the morning, the wren rising hour, until the whole wren family retires to rest. Kindly treatment and freedom from cats and other annoyances have attracted such large numbers of wrens to the specially constructed nest boxes that seven acres are all that are included in the intensive survey. The nest boxes on the rest of the farm and neighboring estate are kept under a more general (*Turn to next page*)

“Modern” Wren Marriages—*Continued*

observation by means of weekly inspection trips with the laboratory Ford.

The identification of the individual bird at Hillcrest is begun with the egg. The mother bird, inured by kindly treatment, will allow the human beings that she knows and trusts to take out her eggs to be measured, numbered and weighed to determine the rate of evaporation during incubation and then put back in place again. When the eggs have hatched the young birds are carried to the laboratory where their body temperature is taken. For this purpose a special thermometer has been devised

that is small enough to go down the avian throat. Surprisingly enough the nestlings take kindly to this instrument. Perhaps they think it is a new kind of angleworm.

Each nest box is numbered and a record kept of the band numbers of its master and mistress and the whole family. The bands are not put on the latter until the tenth day because the legs are too small for the regulation U. S. Biological Survey band until this time. It speaks volumes for the patience and dexterity of the workers at Hillcrest that practically no eggs or young birds have been

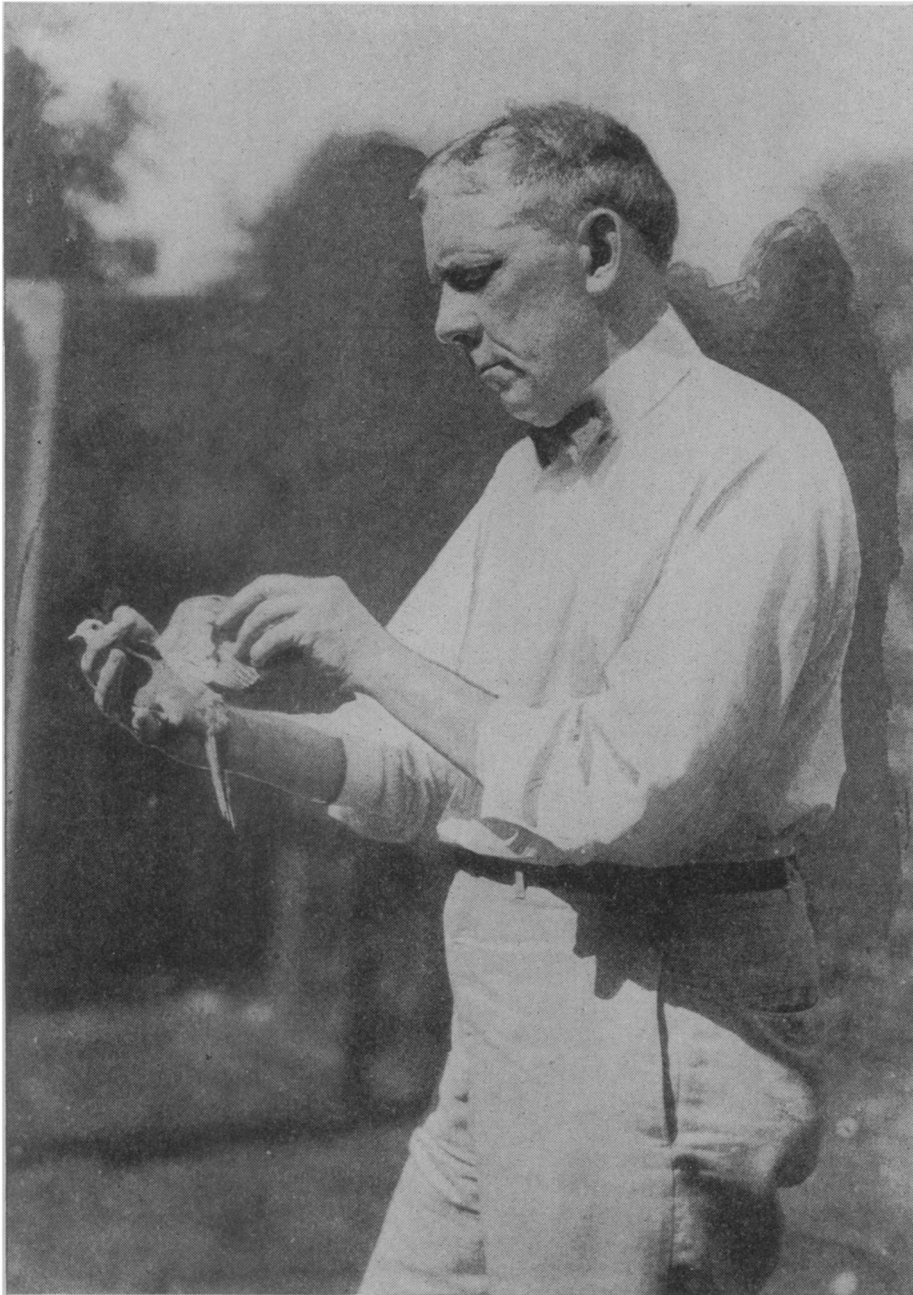
lost as the result of handling, in spite of the fact that the red tape the wren babies undergo after hatching compares favorably with that confronting a new-born infant in a modern hospital.

To aid the studies on incubation, an elaborate electrical device has been installed that tells just how much time Mother Wren spends keeping her eggs warm and how much time she takes off.

Thirteen minutes appears to be about the average length of the time she can stick on the job, but she seldom stays off longer than six minutes. Almost always she broods her eggs all night during the incubating period, though there is a record of one flighty female wren that went out for the evening at 8:50 P. M. and did not return until 1:04 A. M. During the last three days of the incubation period the absences are much less frequent but of about the same duration. The wrenograph, as Mr. Baldwin has christened this instrument, is an electrical apparatus that establishes electrical contact whenever the bird comes on the nest. It is connected with a self-recording device in the laboratory that shows at a glance whether the wren in Box No. 147, for instance, was on her nest at 7:30 last night and if she is there now or out taking a bit of lunch.

In addition to this a potentiometer that is connected with the electric-light circuit registers the temperature of the nest and eggs. A tiny wire stretched across the eggs that looks like a bit of thread is connected with another self-recording instrument in the laboratory that registers the temperature of the nest to within one degree Fahrenheit. Thus the observers can see just how far the temperature of the eggs falls each time the mother bird goes off the nest. This is probably the first time that such apparatus has been used in working out problems of the life history of birds. The data collected is being used to determine the adjustment in the nest to warm and cold spells outside during the incubation period.

The immense amount of data on the house wren that has been collected at the Baldwin Laboratory will eventually be used in a book on the life history of wrens that will tell for the benefit of ornithologists all the intimate details that Mr. Baldwin and his students have learned in the course of years of study.



S. PRENTISS BALDWIN has handled 30,000 wild birds in the last ten years without any of the birds suffering injury