J. K. 9. Selvey 1727

Observations of A Young Robin Brood.

During the summer of 1927, a series of observations were made on the nest of a Robin near the University of Michigan Biological Station. This was done under the direction of Dr.F.N.Blanchard, of the University of Michigan Zoological Dapertment, and Miss T. Nelson, of Hunter College New York City, New York. The time used in observation of the nest was fourteen days, which was from the ninth of July, until the twenty-second of July. About three hours each day were used in observing the nest and these were divided into a number of short visits so that nothing would happen with out being observed. Before the above mentioned observations on the young in the nest were started, others had been made on the nest while the eggs were in the process of broubation.

The nest was first observed on the 27th of June, 1927. It was located on the west side of the Biological Station about thirty feet from one of the laboratories. The nest was about eight feet from the ground, placed in a red maple, and made up of string, grass, twings, and lined with fine grasses, rootlets and mud. The male and the female robin were near the nest and the male was singing.

On Tausday, June 28, the female was observed sitting by the nest looking very intently at everyone that passed but disturbed by no one. MI

In a few minutes she flew away and on looking into the nest it was discovered to contain one blue egg which was numbered one with India ink. It was one and two tenth's inches in length and eight thath's inches in width. In the afternoon of the same day there was another egg in the nest so it was numbered two in the same way as the first one. The next morning it was found that the nest had three eggs in it, so the last one was numbered.

During the afternoon of the same day the female sat on the nest most of the time and when she left the male took her place. It was quite obvious that there would be some trouble in deciding between the male and the female when one or the other was on the nest so the male was caught at night and a small white string put around his neck.

A few days passed during which nothing of special interest was recorded. On Monday, July 4, it was found that the numbers on the eggs could not be seen and it was assumed for a little while that the ink had been eaten off. On turning the eggs over however, it was at once seen that they had been first turned by the birds in the process of incubation. By observing the direction that the male assumed in sitting on the nest it was spen that he had made a complete revolution in the different times he had aided in the process of incubation. Later the female was observed to do the same way as she carried on the process, and it was also seen that the female afided more in the process than the make as she was observed to be on the nest more than the male was during the time that the nest was under observation. Neither the female nor the male were heard to sing or even chirp during the time the eggs were being incubated. The female did all of the fighting when any intruder approached the nest, the male was apparently unconcerned.

on Saturday morning July 9, I went to the nest and scared the female away. She did not seem to mind at first but when I approached and peered in to the nest she attacked me. The first time that she attempted to peck me she midded, but the second time she struck me on the head. The attack seemed at first to be uncalled for but on looking into the nest of could see the reason why she had raised such a "fuss". One of the eggs had hatched and the shell on the second one had been broken in the middle. I watched the egg

for a few minutes and it began to breadall of the way around, then suitenly it opened completely and disclosed a small, wet, naked bird. The eyes of the birds were closed and they are apparently to weak to even open their mouths. The two eggs that had hatched were the ones that had been numbered "one" and "two". On observing the nest some distance away it was noticed that the female carried most of the egg shells away, eating only a very dmall portion of those that were first present. In the afternoon of the same day the female robin way found fighting with a stray one and the two young ones on the ground. They were put back into the nest and no more observation were made that day.

The next morning a surprise was held in store when it was found that the two young ones were missing and the other egg had not hatched. One of the young ones was found on the ground and the other one was not found at all. The next morning the last of the eggs hatched and the female carried all of the shell away from the nest.

On July 12, the process of feeding was observed for two hours during which time the female fed the young ten times. They were fed on earthworms and strawberries most of the time with an occasional morsel or some other kind of food that was picked up near a kitchen some place, She would take the part of food and tear it into very samll bits and attempt to thrust it down the throat of the young one, if it would not take it she would try the other until it was finally eaten; One time she appeared on the edge of the nest with two strawberries which she devoured herself, looked at the open mouths of the young ones and flew away for more food. In the evening of the same day the female was found to be fighting with the male

of the same nest. During the fight a stray robin came i and carried the olde

of the two robins away. From that time on the femal would not permit another bird near to nest and a person had a very hard time getting within observing distance.

on Sunday July 17, the nest was observed in the morning and the mother bird was brooding the young one. In the afternoon the nest was empty and on close observance it was seen that the young one was on the ground neather nest. It was returned to the nest in good order in hopes that it would remain so for quite a while. Howevery during the course of the afternoon the young bird was put back into the nest four times. The young bird had grown so that it had a heavy gray down on the wings and the back, with a few hair-like gray feathers on the rest of the body. The bill was yellow and very flat with a distinct curve near the middle of it, and the legs were just strong enough to support the weight of the body.

out of the ordinary had happened. At noon the mother bird engaged in a battle with the male as he attempted to return to the nest for a visit. During the fight the young bird who had had just reached the age of fourteen days, hopped out of the nest to seek a queter home for itself in other parts of the world.

Market 1	Age	Interval	
July 9 " 10 " 11 " 12 " 13	1 day 2 " 3 "	15 Minutes 15 H	
H 12 H 13 H 15 H 16 H 17 H 19 H 20 H 21	5 " 6 " 7 " 8 " 9 " 10 " 11 " 12 " 13 " 14 "	30 " 39 " 30 " 40 " 48 " 55 " 60 " 62 " 68 " 75 "	