

SOME OBSERVATIONS ON NESTLING REDWINGED BLACKBIRDS
By Jean Haller

This paper will record some observations I made during four years (1962-1965) as a co-operative bander in the Redwinged Blackbird nestling banding program sponsored by the Department of the Interior. It may be of interest to banders also concerned with the program. As the purpose of the field work was to band Redwing nestlings, and my intent was to do so with the least annoyance to the birds, the facts gathered here are concerned mainly with nestling survival, rather than with the entire study of Redwinged Blackbird nesting.



Locale of Nests. 741 Redwing Blackbird nests were found over the four year period. Some of these nests were found in hay fields, in abandoned fields, and in fields in soil bank; but the majority were found in the swampy swale and along the borders of an abandoned railroad track on the west side of the Genesee River. This track runs north and south through beautiful farm country near Avon, New York; and alongside it lies the old bed of the Genesee Valley Canal, which was officially abandoned in 1878. Some of this tract is accessible by car. Parts of the old canal bed required hip boots in order to reach nests.

Foliage. Because working the swale along the old canal and railroad track was easier and faster than working the fields, more nests were found built in reeds than in other foliage. However, as an example of the adaptability of the Redwing, it is interesting to note even some of the plants the bird will use to anchor its nest. Of 686 nests noted, there were:

- 395 in reeds (cattails)
- 133 in goldenrod
- 60 in bushes (usually willows)
- 53 in grass
- 20 in trees (usually thorn apple)
- 12 in tick trefoil
- 3 in curly dock
- 2 in mustard
- 1 each in dandelion, catnip, cinquefoil, burdock and grass, chickory, wild rose, cattail and grass, in a dead weed $3\frac{1}{2}$ feet high, and one on bare ground.

All nests were composed of dried reeds or grasses. Only one of 741 nests incorporated extraneous material: that one had Kleenex woven into it; built by June 6th, it still contained four unhatched eggs on the 30th. Most nests were between $1\frac{1}{2}$ and $2\frac{1}{2}$ feet high, but the range was from ground

level to 10 feet. Most nests were well built, but occasionally one would break down under the weight of the young, and when that did happen there was evidence that the female had tried to make repairs.

Marking the Nests. Many ways of marking the location of nests for future visits were tried and found unsatisfactory. Foliage ankle high in early May can be waist high in early June; birds like to untie ribbons knotted at the top of plants. The ideal nest marker would be a lightweight unbreakable orange plastic stake about 58" high, 1" wide and $\frac{1}{2}$ " thick, pointed at the bottom end, and numbered clearly enough on both sides at the top to be read from a distance through binoculars. Lacking these, we used wooden stakes 50" high, cut at the local lumber company. The top 6" of each stake was painted bright orange, and numbered. A few unnumbered stakes had to be carried along to replace those chewed through by woodchucks, were those stakes ever found again. Perhaps soaking the bottoms of the stakes in creosote might have kept the woodchucks off. The only other stake predators seemed to be small boys; the best defense against them is immediate enlistment of their aid and interest.

Keeping Track of Nests. A notebook with space provided for each nest is essential. An 8" x 5 $\frac{1}{2}$ " loose-leaf notebook is a good size for the field. Different areas can be separated by tabs, and each section prefaced by a sketch map of the area. Then, as each nest is found and staked in a certain area, its number is put in approximate position on the sketch map, as well as given space on one of the following pages. Each side of a page has ample room for four nests. A numerical index in the back of the notebook is also essential. It can contain not only the area in which any nest is located, but its page in the notebook, and any other information desired about the nests, such as number of eggs, or young, or number banded, and so forth. A nest will have an average of four visits. For banding purposes, eggs already in nests when found must be considered ready to hatch, and must be visited six or seven days later.

Nests Productive of Eggs. Of the total number of nests under consideration here, 741, 566 (76.4%) were productive of eggs, and 175 (23.6%) remained empty.

However, in 1964 a phenomenon appeared along a 1120-foot stretch of the old canal bed. Here 87 nests were built, mostly at the north end of the narrow strip of water, 53 on one side, and 34 on the other. Most were very close together and often in tiers of two or three, one above another or next to another in the same clump of reeds. 57 of these nests remained empty. If these 87 nests are discounted, then 83% of the remaining nests were productive of eggs, and only 17% remained empty. Not knowing quite what to do with these 87 nests, I have left them in the reckonings as they were, after all, nests found. But their proximity to one another, and the high number which remained empty are far out of proportion to the usual. These nests were first found on May 16th, when 62 of them were already built but only four contained eggs. About two dozen Redwings were present,

and it must be presumed that the nest builders were among them. In the 87 nests considered, a total of 75 eggs were laid in 30 nests. 45 hatched and 36 nestlings were banded. Three other nestlings were known to survive but escaped the nest before being banded.

Relative Success of Eggs. The total of productive nests, 566, yielded 1907 eggs, or an average of 3.37 eggs per nest. Of these eggs, there were:

1163 (61.0%)	hatched
616 (32.3%)	lost
128 (6.7%)	sterile

It is not usually known why eggs or young are lost. A few simply could not be found again; a few were not revisited soon enough. A fox may run a line of nests and take all the contents without damaging the nests, but a raccoon will always tear the nests apart. A herd of cows once trampled through a section of swale, destroying four nests with 14 eggs, and causing all the birds in that area to move out. Heavy summer storms take a large toll, but hawks and crows do not seem to bother the blackbird nests.

An occasional sterile egg will remain in the nest even after the young are fledged, especially if five eggs were in the original clutch. When the whole clutch is sterile, the female will continue to sit for a long time. When last visited, one bird was still sitting 18 days after her 3rd egg had been laid.

Relative Success of Young. 32 of the 566 productive nests were lost. These contained 74 eggs and 21 young. So, of a total of 1907 eggs, 1833 were followed to completion. Of a total of 1163 hatched young, 1142 were followed to completion. From the 534 nests followed to completion:

634 young	were fledged,	or 55.6%	of those hatched
473	were lost -	41.4%	
35	died in the nest -	3.0%	

Banding. 613 nestlings were banded; that is 52.7% of the hatched eggs, or 32% of the total number of eggs. 21 other young were fledged but escaped the nest before being banded.

Dr. Arthur A. Allen's description (in Bent, 1958) of the plumages of nestlings is most helpful in deciding when the nestlings are to be banded. Nearly all birds are large enough to retain a #2 band by the 6th day, when the feather sheaths of the wings break open. We use the MacDon-ald banding pliers as gauge of the tarsus as well as for banding, and we are now using only #2 bands. Birds should be banded on the 6th day if possible because many 7-day-olds can scramble from the nest and are hard to retain in the nest when returned to it. There is apt to be a variation in the sizes and even in ages of young in any nest, so it is not always

possible to band all young in a nest at the same visit. But 7 and even 8 day old young can be banded with least chaos by approaching the nest in late afternoon or early evening when the birds are sleepy and not likely to attempt leaving the nest.

Month	Week	Eggs Laid		Young Hatched		Young Banded	
		No.	%	No.	%	No.	%
May	1	9	2.0	0	0	2	0.3
	2	33	7.2	2	0.6	26	4.2
	3	178	38.9	18	5.6	7	1.1
	4	133	29.1	115	35.8	111	18.1
June	1	29	6.3	82	25.5	205	33.4
	2	15	3.0	34	10.6	110	18.1
	3	20	4.8	15	4.7	51	8.3
	4	15	3.2	20	6.2	34	5.5
July	1	12	2.6	16	5.0	25	4.1
	2	11	2.4	11	3.4	12	1.9
	3	2	0.5	5	1.6	24	4.0
	4	0	0	3	1.0	6	1.0
Total		457	100%	321	100%	613	100%

This table shows known dates for eggs laid and young hatched, and for young banded. It might be pointed out that nests under "eggs laid" are not necessarily the same nests as those under "young hatched" or "young banded", as some nests were lost or destroyed and new ones come upon throughout the season. Of course, the bulk of the nests appear in all columns.

Sexing the Nestlings. So far, we have found it impossible to sex the nestlings with certainty at the nest site. Up to six or seven days, the size of the bird could be more directly related to its nutrition than to its sex. Mr. J. Fred Williams (in Bent, 1958) states: "With the age of nestlings known to the nearest day it proved possible to distinguish between the sexes by means of weights after the fifth day, and by means of tarsal lengths after the eighth day." As it now averages well over one hour's time in the field per banded bird, trying to handle eight day old birds for sexing and banding would be even more costly of time. We are still looking for some device for weighing nestlings at the nest site. Mr. Robert McKinney relays the suggestion that the relative amount of pink on the skin at the shoulder of the bird may indicate the sex. We have been too fearful of injuring the young to make use of this suggestion.

Conclusion. The Redwing Blackbird nestling banding program is to be carried on for another five years. It is an interesting and worthwhile program; more banders should be encouraged to join it. It is hoped that this paper will be of help to newcomers, and of interest to others. My thanks for kind and spirited assistance are due my friend, Alice Wray (Mrs. Charles Wray), who wore the hip boots and did all the hard work. I thank also Mr. Charles Blake and Mrs. Stanley Dickerson for their valuable suggestions.

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(Pesola field balances may be the answer to the problem of weighing the nestlings at the nest - see EBBA News Vol. 29, No. 3. -- Ed.)



SOME OLD-AGE RECORDS
 By Eleanor Dater

Following are some longevity records noted at my home banding station in Ramsey, New Jersey ...

Bluejay banded March 20, 1956; found dead in yard Feb. 11, 1966.

Black-capped Chickadee banded April 22, 1954; last return Nov. 2, 1964.

White-breasted Nuthatch banded Oct. 5, 1960; last return May 4, 1966.

Catbird banded May 5, 1957; last return May 7, 1965.

Blue-winged Warbler banded May 20, 1961; last return May 17, 1966.

Chipping Sparrow banded May 15, 1959; last return May 9, 1965.

Field Sparrow banded Nov. 3, 1959; last return April 17, 1965.

Song Sparrow banded March 14, 1959; last return May 5, 1963.

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