REDWING BANDING AT TUCKERTON - SUMMER 1960

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Photos by FPF Jr.

In June 1959 the authors banded 43 young Redwings at Tuckerton, N.J., in two visits (EBBA NEWS July-August 1959); this year, the banding was continued on a much larger scale. In seven trips, 360 young Redwings, mostly nestlings, were banded; a table showing dates follows:

June 15:	144	June 26:	20
" 16:	73	July 2:	53
" 20:	54	" 10:	14
" 23:	2		360

The area in which this banding was done consists of a road running from the town of Tuckerton for several miles southward to the Great Bay. It is bordered on either side by a line of dense bushes, beyond which are broad expanses of salt marsh. (See EBBA NEWS July-August and November-December 1959.) This line of bushes is fairly continuous for most of the length of the road, with occasional breaks, and interrupted by several bridges and boat-rental establishments. We found this area to be unique among Redwing breeding areas, in that breeding was done in the bushes, whereas the birds fed out in the marsh. Therefore, territory seemed to be of little concern to the birds and a much greater concentration of nests was possible - this will be discussed at more length below.

The banding done this year differed with 1959 largely in that most of the birds banded this year were nestlings still in the nest, whereas last year most of the birds banded were "locals" already out of the nest, and it was naturally very time-consuming to catch each one. Also, having become familiar last year with the Redwings' nesting habits at this place we were better prepared to find nests more efficiently, and cover each part of the area more thoroughly.

Nests were generally located in bushes outside (on the marsh side) of the main line of barberry bushes from five to seven feet above the ground, built in a crotch of branches. The majority of nests were about five feet above the ground wherever bushes were high enough to permit it; in some cases, the bayberry bushes were only about three feet high, and nests

were also located in these. Low nests of this sort were noticed more often later in the season. However, in many spots, especially where there were few or no bushes outside of the bayberry, nests were built in the bayberry and these were usually higher than the others, probably simply because the bayberry averaged eight to ten feet or more in height and suitable crotches of thinner branches for locating nests tend to be near the top of the bushes.

Spacing of nests varied a great deal, and seemed to have little relation to any notion of territory or, in some spots, even to availability of nest sites. Toward the outer end of the road, nests were spaced from ten to twenty yards apart, although the vegetation was quite thick and would have permitted many more nests. In other spots, nests were spaced more closely, and in a few places of thick vegetation, especially where it extended into the marsh somewhat more than usual, nests were extremely close to eachother, some as little as four feet apart. It seems very probable that these extreme cases of proximity of nests represent two or more females mated to the same male, although it is possible that even this is not the case if the territorial instinct is of such little importance here.

Of the 116 nests from which nestlings were banded, 8 had one nestling, 26 had two, 52 had three, 28 had four, and 2 had five. In addition to these, 22 "locals" were banded, three of which had just left a nest at our approach. As might be expected, where there were only one or two young in a nest these birds were well advanced in development. We often found one egg, apparently sterile, in nests which also had young in varying stages of development; unfortunately, in the press of banding and keeping of records, no count was kept of these, but a sterile egg was found in the neighborhood of 30 times. Many empty nests were found also. in some cases these were new nests in which eggs were subsequently laid, but often this was not the case. Early in the season, before any young were fledged, it would appear that these nests were built and abandoned, for unknown reasons.

In the past, and at other Redwing areas, the behavior of the adult birds can be of considerable assistance in locating nests, as their state of agitation increases the closer one comes to a nest. However, here the observation of a bird's "reaction" can be misleading. Often it was possible to band a nestful of young without exciting the interest of any adult bird. Sometimes a female would appear over the bander well after he had located a nest and begun banding. It appears to be a matter of whether or not a parent bird, off feeding in the marsh, happens to notice that its nest is being molested. On the other hand, once one or two birds begin the usual reaction behavior -- flying back and forth over the nest and intruder, and uttering alarm notes - several more Redwings are likely to appear and act like the first. This may occur whether or not the area is one of many closely spaced nests. Often from 10 to 15 Redwings will

be flying around, diving, and making noise over a nest; in these cases the majority of the birds are males. Females, when present, are less in evidence, flitting about more or less quietly in the bushes. It was not clear whether non-breeding individuals were involved in this behavior, although it seems likely that some would be present.

Our usual procedure in finding nests was, therefore, to ignore the adults in most cases and to comb each bunch of bushes for nests. We would, of course, pay attention to one or two adults showing signs of agitation nearby, although this also could be misleading.

Such things as the placing of nests, behavior of adult birds, and the nature of the nesting habitat here make it appear that the Redwing's territorial instinct has been greatly modified or subdued here. In the more common types of Redwing nesting area, there is a broad marsh with suitable nesting sites interspersed in it, and in such places the birds maintain a distinct territory. However, here the nesting area is long but very narrow, and distinct from the feeding area, which is a huge, flat salt marsh with short grass, and no higher vegetation at all to provide nest sites. Obviously the Redwing's usual territorial instinct is not operating here, as evidenced by the very close placement of nests to each other. Those birds which breed at Tuckerton appear to have adapted themselves, as far as instinct is concerned, to the fact that a large feeding area and a large nesting area exist beside each other but not as one habitat, as in the typical "Redwing marsh", and have adapted themselves sufficiently so that a maximum number of birds can utilize this area, -- by placing nests more closely than Redwings normally would tolerate. It should be noted here that Redwings were seldom or never seen chasing each other or showing other signs of protecting territory, as so often is seen in other places. However, we have seen Redwing males singing on a perch early in the season, but no observations were made to see if any single bird used the same perch or occupied one area.

This transition from a territorial Redwing to a nearly colonial Redwing must have been very gradual; after the road was built to provide access to a Coast Guard station at the end, and bushes grew up on each side of it. The first birds to nest out here as the bushes grew big enough to support nests probably maintained territory, but due to the great expanse of feeding area as opposed to relatively limited nesting area, the pressure of incoming population doubtless grew, and one of the

reasons for this subordination of territorial instinct may be simple pressure of numbers. But also, in the more usual Redwing breeding area, the birds nest in about the center of their territory, and are thus surrounded by their own feeding area, which would be of less value to them if other Redwings were also allowed to feed in it. However, at Tuckerton a bird on a nest has only one direction in which to go to feed, which is straight out to the marsh: it is by no means surrounded by its feeding area. As far as feeding is concerned the birds need be oriented in only one direction, rather than in all directions; this may be one of the principal factors which caused Tuckerton Redwings, presumably identical in makeup to other Redwings, to lose to a large extent their territorial instinct.

Undoubtedly, a great deal of further observation and study of the Tuckerton Redwings is necessary before amplifying this theory much further - and we hope to be able to do so - but indications at present seem to support these reasons for the dense breeding population here. One might say in passing that this is a good example of the many avenues of study which are opened through banding.

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SHOREBIRD MIGRATION at THOMASTON, MAINE

Frederick V. Hebard, of Philadelphia, Pa., writes: "I suggest you plan to band next year at Thomaston. After my experience this summer I can say with a great deal of confidence that except possibly for Chatham and vicinity on Cape Cod, Thomaston has a greater shorebird migration than any place on the eastern seaboard north of Pea Island, N.C. It was absolutely fantastic what we saw there; the numbers and variety were tremendous. . . . The birds arrive on the full moon in July, August and September in greater numbers than at other times."

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