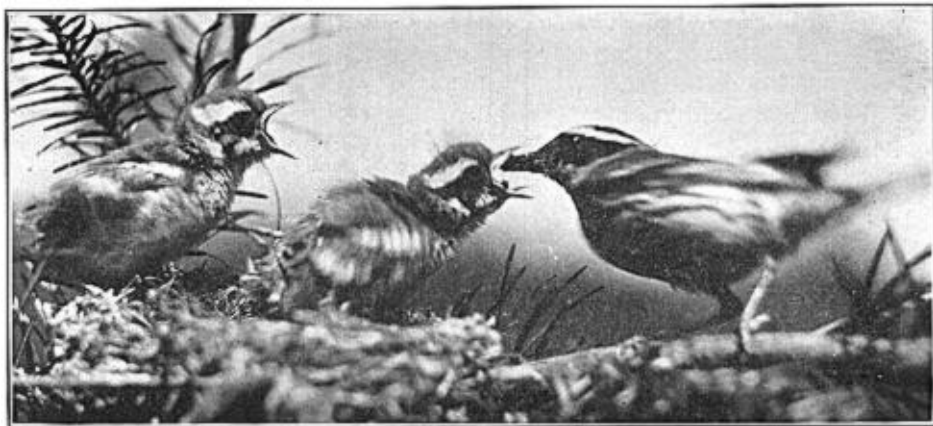


what scandalous among my own neighbors. Maybe he blamed his wife for my interference or he may have been tired of her fooling, at any rate she quit her deceiving antics and soon led her children off through the bushes.

Berkeley, Cal.



FEMALE BLACK-THROATED GRAY WARBLER FEEDING YOUNG

Nesting Habits of the Black-headed Grosbeak

BY ANNA HEAD

DOES the same pair of birds return to their old nesting-site? This is a question difficult to determine, as, from the nature of things positive evidence is almost impossible to secure. In some cases a ring has been fastened about the leg of one of a pair, and so it has been proven that he returned several years in succession to the same locality. But from slight indications pointing in the same direction, even though no positive proof is forthcoming, I am inclined to think this is commoner than usually supposed. The evidence which has convinced me may not be so cogent to another as to myself. It depends chiefly upon individual traits of character and of song observed for two successive years in a small valley in Mendocino county. The bird to which I paid most attention was the black-headed grosbeak (*Zamelodia melanocephala*), and at the end of the first summer I felt personally acquainted with several pairs.

In one pair the female was brave and did a large part of the feeding, brooding the birds willingly in my presence, while the male circled about and sang incessantly. This pair chose a damp willow thicket, the home of the chat, for their nest, and placed it rather high on a swaying twig of willow, stayed by two crossing blackberry vines. I had the pleasure of watching the whole course of rearing the young, and saw where they were led off to the right along the edge of the swamp, while still totally destitute of tails and very downy about the head. This I consider a rather unusual nesting site, as the grosbeak seems to prefer dry hillsides and manzanita, madrone, or hazel bushes. So when the second year I found

a nest, also placed high in a clump of willow and blooming elder, within three yards of the first, the presumption in my mind was strong that it was built by the same pair. When the mother proved to be a brave bird, and stood my gaze steadily, and when, as last year, this brood was the first to leave the nest, and took the same course through the bushes, my conviction amounted to certainty. Another pair last year had chosen a hazel bush overhanging a little path leading to the spring. Of these I wrote in my notebook that they were very wild and that the female refused to go on the nest as long as I was in sight, although I went to a distance and kept very quiet. Her mate went on at last, but he, too, was a timid bird. This year the same nest was in place, for slight and apparently carelessly built as they are, they will outlast many a more elaborate nest, and endure the storms of winter remarkably well. In the very next bush, and at about the same height was another nest, with a pair whose actions were exactly like these of last year. When I looked at the nest, although I did not touch it, the female raised such an outcry that she drew about her a pair of tanagers, a handsome male spurred towhee, a pair of Macgillivray warblers, and a Cassin vireo, who had a great deal of advice to offer in his loud, preaching tones. The male grosbeak satisfied himself with taking up a post of observation on a high twig, and driving away another male, whose sympathy was evidently offensive to the husband. I have noticed that each pair regarded as their private property a circle of perhaps a hundred yards about their nest, and resented the appearance in that ground of any of their own race. They were never far enough away from another nest—however, to be out of ear-shot, and one male seemed to vie with another in musical display, at leisure moments.

Another pair had managed to conceal their nest from me last year, but I knew its whereabouts in the thick woods, and had noted the song as having a peculiar refrain of four descending notes. This year I traced the male by this song, and happened to sit down at the very foot of a young madrone in which the nest was placed. I found this pair most engaging and fearless, and although the young were nearly fledged, I felt repaid for the time that I gave to watching them. I found that the male was much the bolder bird, although the female, after starting back several times at sight of me, overcame her fear and delivered the mouthful of green caterpillars which she was carrying. I found that they fed in perfectly regular rotation, at intervals of about twelve minutes, and that the one bird remained on guard while the other was seeking food. They spent this time differently, however. The male always took up a position on a tree near by and sang till his wife returned. Once after a prolonged absence, he grew silent and anxious, and finally went off to look for her. When she was left in charge, she either sat silently in the same tree or on the edge of the nest, seeming to have a soothing effect on the young, who slept as long as she was there. She would not stir and waken them for any movement of mine. The different influence of the two parents was marked. When the father was heard returning with his loud, cheery song, which did not seem to be interfered with by his big mouthful of wriggling worms, every youngster was alert and standing on tiptoe to get first taste. The father always brought more food than the mother, and the fledglings seemed inspired by his bustling ways to be adventurous. One stretched his wings and crawled up to the edge of the frail nest, and I could see that it would not be long before he would fly. Only the father attended to the cleansing of the nest as long as I watched them. The father's singing so constantly near the nest, combined with his generous feeding, would certainly make an impression on the

memories of the young birds, and help to mould their song when they come to maturity. They noticed the father's song every time before he came in sight.

The male grosbeak is certainly most devoted and cheerful about his domestic duties. He sings to his mate all through the period of incubation, sings while feeding the young and during the anxious time of their first flights, and I have even seen him sitting upon the eggs and singing merrily.

Another reason why I think that the same pair returns to the same nesting site in successive years is that in several cases I have found nests of different years in the same small tree. In one manzanita bush, about ten feet high, were three nests, one almost fallen to pieces, one of last year, and a fresh nest with a bird on it. It may be argued that a second bird chose the site because it was eminently suitable; but where there are so many shrubs all alike, I do not think one can be considered more suitable than another. A more likely suggestion is that the young birds might return another year to the neighborhood of the nest in which they were reared. Further observations on the plumage of the birds would settle this point as it takes several years for a male grosbeak to attain his full beauty of plumage.

Destruction of Birds by Wires

BY W. OTTO EMERSON

IF one does not happen to live where he can observe the disastrous effect upon bird life of numerous telephone, telegraph and electric power wires, which are strung along our highways, across lines of migration or favorite paths to feeding grounds, he would be surprised at the number of our shore birds destroyed annually. Within the past few years several instances have come under my observation which seem worthy of record.

The first case was noted September 8, 1898, in connection with the telephone line which, passing over the salt marshes, joins Haywards with a landing on the bay shore, some four miles west. Only two wires are used, which are attached to fourteen foot poles set some twenty feet out in the Salicornia to the right of the roadway. Beyond this, on both sides of the road, the marshes are cut up for miles into a series of checker-board ponds for salt water evaporating purposes. In August, September and October these ponds are a mass of glittering white—more or less as the water has been run off. Small shore waders come by the thousands to feed upon the mass of larvæ which collect about the edges of the ponds. On the date mentioned I drove over the road for the first time to find what fall migrants had returned. On picking up eight or ten dead sandpipers from the road, I was at first unable to make out what had killed them. I then noticed a fluttering bird out in the marsh in line of the phone wires, and found it to be a phalarope with a broken wing. This revealed the secret. I soon observed a flock go by from one pond to another but saw none of them strike the wire that trip, but later saw several individuals knocked out of a flock of sandpipers. I picked up forty dead birds that lay along the road and about the marsh. Some were under the wires while others would be flung off ten or twenty feet by the impact of hitting a