THE BROWN THRASHER, (TOXOSTOMA RUFUM) EAST AND WEST.

BY ALTHEA R. SHERMAN.

Various changes in the habits of some North American birds are so well known that only the briefest reference to them is necessary, such changes as have occurred in the choice of nesting places by the Chimney Swift, the Purple Martin, and the Barn Swallow since the advent of the white man on this continent, or more recently changes in the nest site and feeding habits of the Nighthawk, since the introduction of electric lights into our cities. If similar changes are taking place in other species it is of importance to know them, and to ascertain, if possible, the extent of the variation in habits and the causes that have led to these changes

For several years the descriptions of the habits of the Brown Thrasher that have appeared in various ornithological writings, have led me to think, that there may be sectional variations in the behavior and habits of this species, and this impression has been deepened by conversations with several of its observers, whom I met at the recent meetings of the American Ornithologists' Union in Cambridge, Mass. It is hoped that this article will call forth testimony from others, that will show whether or not there do exist real differences in habits, and in case there are such, that thereby they may be placed on record for the benefit of future workers, who may be able to discover the causes of these changes, also in which region it is that the species is divergent from typical Brown Thrasher behavior. In matters of this kind the observations of one person through a series of years cannot cover thoroughly anything other than a small area; and it is possible to reach satisfactory conclusions only after securing testimony from many regarding their small fields of observations.

Since the view point of others with whom I have spoken refers chiefly to eastern Massachusetts birds, and my own observations have been made in northeastern Iowa, it is to

Brown Thrashers in these localities that references are here-The variations, believed to exist, relate in main to their choice of habitats, and nesting sites, to the apparent shyness of the species in one locality and its boldness in the other, to which is added some comparison of the relative abundance of the species in the two regions. I am told that it is not a common species in eastern Massachusetts, whereas I class it as such in northeastern Iowa. Its abundance in my neighborhood in 1912 is shown by this: A half dozen pairs located their nests within a quarter of a mile of our house; two pairs of Brown Thrashers nested on our grounds each bringing out two broods, the next pair was about six hundred feet to the northeast, and again to the northeast an eighth of a mile from the third nest was the fourth pair, a quarter of a mile westward of it was the fifth pair, and the same distance to the southwest of their nest was the sixth pair.

In eastern Massachusetts it is said to be a nesting bird of the woodlands, rarely coming close to the homes of men to build its nest. This may in part be due to the pruned, trimmed, and shaven condition of trees, shrubs and lawns. I remember once seeing a pair nesting in a hedge quite near a house at Quaker Hill in eastern New York. It is a bird that seeks a bit of thick and tangled growth in which to build, but in Iowa it finds such places to its taste in the man-planted trees and shrubs that grow upon prairie soil, usually not far from human homes. It is eminently a house-yard bird, although it sometimes nests in patches of bushy second growth that have sprung up on clearings made in the woods.

Its nests in Massachusetts are said to be either on the ground or in bushes from a foot to three feet from the ground. In Iowa I have never found a nest nearer than eighteen inches or two feet of the ground, one of these being in the lower branches of a spruce tree, the other in a brush pile. Another was found built in a brush pile, but farther from the ground, these are the only nests thus

situated that have been found, but brush piles on prairie land are rare. The next locations nearest the ground are where nests are built in such bushes as gooseberry, lilac, and syringa, when they are from two to three feet above the ground. The highest nest situation found was one in a tame crabapple tree about ten feet up; other trees frequently used are spruce, willow, apple and plum trees in which a majority of the nests are about five feet from the ground, always a trifle too high for women of medium height to look into without a box or chair to stand upon.

It is the behavior of Brown Thrashers as described by New England observers that suggests their greatest variations from their kindred in the Middle West. Description of the actions of the species in the former place seem to emphasize its shy and skulking habits. Whether the Iowa Brown Thrashers are shy or bold may be gathered from the following account of them.

In our household it is one of the best beloved of our birds, even the manner of its arrival in the spring setting it apart from the others, its return to us bringing a leap of the pulse, and a pleasurable thrill surpassing that felt for our other summer companions. Our first arrivals, the Prairie Horned Larks, may be heard on the first mild evenings after the middle of February, as they bid each other "Goodnight," and retire behind their respective clods of earth, but these birds are out of sight in some neighboring field. Undemonstrative Robins and Bluebirds next appear without signs of joy or familiarity, to be followed soon by Blackbirds and Meadowlarks, that sing their pleasure in muffled voices, as if they had caught bad colds as they journeyed northward; Sparrows, Shrikes and several other species succeed them in much the same manner, until the last days of April or the first of May, when in the gray dawn of some morning the wakeful one of the household steals down the stairs to arouse the heavy sleeper exclaiming: "Do you hear that? Thrashers have come!" and later the neighbors say: "Your Thrashers have come! I heard them singing at break of

day." One is pretty certain to be in sight on the topmost twig of one of the tallest trees pouring forth his full-throated joy. Perhaps one reason for our fondness for him is because he seems so glad to get home, and another, because he makes the yard his summer home in the fullest sense of the word; there having been seasons when the Brown Thrasher has been seen on the place every day from its arrival in the spring until its departure in late September.

Sometimes the male comes first, at other times the pair arrive together, and the merry, rollicking spirit they show suggests the home-coming of children from school; but play and song are of short duration, and the pair settle down to the serious business of the summer season. One is forced to admire the sane, broadminded views taken by the male Brown Thrasher. He believes in and asserts his rights to claim an equal share in the affairs of life. He does his half in the building of the nest, in the incubation of the eggs, in the brooding and feeding of the young, and caring for them after leaving the nest.

If it be true that actions speak louder than words, then our Brown Thrashers are among the loudest speaking of birds. Some of their first plain talk relates to the selection of the nest site. As they slip in and out of a certain crotch in some tree, they have told us plainly on several occasions, that this was their choice of nest site before a single twig was laid; and to convince ourselves that we had judged rightly we have visited the tree, and have been scolded roundly for the intrusion by at least one of the Brown Thrashers. The first nest is usually built before any foliage appears on the trees, consequently the operations of nestbuilding are as much in evidence as it is possible for them to be. Often the nest is plainly visible until some time after the young leave it. Once there was chosen a dead plum tree that blew over a few days after the young had left the nest. These remarks refer more particularly to nests in our yard, which most frequently are built in plum trees; when placed in other trees or in bushes they are not so conspicuous.

proof of the openness of the Brown Thrasher's conduct and habits is given by note-books, devoted to detailed records of all observations on the home life of the birds of the door-yard, which show ten pages filled with notes on the life of the Brown Thrasher, to every page recording the doings of that familiar bird, the Robin. This has come about without neglecting the Robin, simply because the Brown Thrasher affords that much more for noting and recording.

So much in sight are the actions of the Brown Thrasher, that they may be read as plainly as an open book, even more easily by some of us, who can translate them without the aid of spectacles, which we must use for reading books. To be sure when the nest has received its first egg one of the pair, crouching low, in an attitude very suggestive of slyness, probably will slip along the top board of the fence for some distance, but he is only acting a part, there being no real skulking in the boldness with which he thus tries to draw the intruder from the neighborhood of his nest treasure.

By the openness of his activities we have come to recognize the incipient signs of nidification, to know when to look for the first egg, the hatching of the young, also when he begins to "whirr" at the cat that his young are ready to leave the nest, and that it is time to imprison his feline enemy, and to ask the neighbors to shut up their cats; we know when to expect him to show his offspring how to pull up the new blades of sweet corn for in this bad trick he does not indulge until the second planting of corn begins to appear above ground; when with a May beetle in his bill for feeding a well-grown young one, he pauses to utter a snatch of song, we know that is is time to watch for the beginning of his second nest. Thus openly he passes his life until the moulting time comes when little is seen of him, but he cannot be called much more of a skulker than the other birds about him.

Brown Thrasher at Grinnell, Iowa, in the Years 1870 to 1890.

It is entirely possible that the conditions of which I speak have materially changed, and that bird students at Grinnell will need to say that these interesting birds have shown a capacity for adapting themselves to changing conditions. This would be interesting indeed.

Grinnell lies in a typical rolling prairie region, with natural woods bordering the streams. These woods were of deciduous trees wholly, with thickets of hazel brush on the fringes, wild crabapple and wild plum thickets usually near the fringe but sometimes well within the woods, and with hawthorn and wild gooseberry characteristic of the broader wooded bottomlands where box elder trees predominated. As the country became settled many osage orange hedges and willow wind-breaks sprang up. My serious bird studies did not begin until the era of hedges and wind-breaks was ushered in, and until the hazel brush patches appeared on many previously exclusively prairie hillsides, these patches affording an invironment in which such trees as wild crabapple, hawthorn, wild black cherry, choke cherry, quaking aspen, and finally over-cup oaks appeared.

The Brown Thrasher is associated with my earliest recollections as one of the most familiar birds. I find in the notes of an older brother who began making a collection of eggs about 1872 the statement that the Brown Thrasher (Thrush he has it) nested in the wild crabapple, hawthorn, and wild gooseberry, less commonly in the hazel bushes. No mention is made of the hedges and wind-breaks which were small then. These nests appear to have been placed from two to ten feet from the ground, if old data records are accurate.

In my experience the Brown Thrashers were inseperably connected with Osage orange hedges, and to a lesser degree with the willow wind-breaks. Some nests were still built in the wild crabapple and hawthorn thickets, occasionally in hazel bushes, and one remarkable situation was on the ground in the midst of an old brush pile.

Just at the close of my studies at Grinnell there appeared to be a tendency for the Thrashers to prefer the premises of the houses which had originally been built upon the open prairie, about which thickets of the sort Miss Sherman mentions were growing up, but there was no diminution of the numbers in the hedges.

Brown Thrasher at Oberlin, Ohio.

The species is not at all common as a breeding bird, although it may become common for a day or more during the spring migration. Here the Osage orange hedges seem to be not only the favorite nesting places, but some nests in orchards, a few in the hawthorn thickets and red cedar trees, and occasionally a nest is found in a brush pile. This was once a densely forested region, and therefore it is altogether likely that the Thrashers were originally confined to the river gorges where such thickets as they normally inhabit were to be found.

Lynds Jones.