## MORE NOTES ON THE MORNING AWAKENING.<sup>1</sup>

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Mr. Wright's paper on 'Morning Awakening and Even-Song' ('The Auk,' July, 1912, XXIX, p. 307) has interested me not a little. and the more so that for many years I have been making occasional observations along that very line. My notes, which began in June, 1883, were made chiefly at different places within thirty miles of Boston, but I have also the record of a single morning near Mt. Katahdin in Maine. They are more fragmentary than Mr. Wright's because they often include only a few of the very earliest singers. For some birds I have more records than Mr. Wright, while for others I have much fewer and for still others which occur on his list I have none at all. My excuse for presenting a few of my own notes after his very careful and thorough records have been published is that, for one thing, they were made in different localities from his and therefore give different results in some particulars, and for another, my deductions from the evidence are at times somewhat at variance with his.

I must explain that my observations were made on various dates during these last thirty years, ranging from May 29th to July 26th, and that before computing my averages I have in every case reduced the time to terms of the summer solstice, subtracting from each record the number of minutes by which the sun rose on that date later than the time of earliest sunrise. Thus on July 26, 1906, at Weston, Mass., the Robins began singing at 3.36, but the sun on July 26 does not rise till 24 minutes later than at the solstice; I therefore deduct the 24 minutes and set the Robin's beginning at 3.12. It may also be worth while to say that the time used in this paper, as in Mr. Wright's, is Standard Time, which at Boston is 16 minutes behind the local time. To get the actual local time, therefore, for purposes of comparison with other places, 16 minutes should be added to each of these averages. time at Jefferson, N. H., is about 14 minutes ahead of the Standard,

<sup>&</sup>lt;sup>1</sup> Read before the Nuttall Ornithological Club, October 7, 1912.

so that that amount should be added to Mr. Wright's figures to reduce them to the local time. The time of earliest sunrise is 4.07 (Standard) at Boston, and, as Mr. Wright states, 4.02 at Jefferson, where his observations were made.

In the first place I find it necessary to differ with Mr. Wright as to the order of the first three species on his list, or rather as to the high rank he accords the first two, the Song Sparrow (Melospiza melodia melodia) and the Chipping Sparrow (Spizella passerina passerina), which, so far as my observations show, belong farther He places these two sparrows before the Robin (Planesticus migratorius migratorius) on the ground that though "the lusty character of the Robin's song from the time of its beginning throughout its first forty-five minutes' period of singing constitutes it the conspicuous early singer and makes it appear to be the earliest singer of all," yet "the Song Sparrow and the Chipping Sparrow both precede the Robin in a few earlier expressions of song." Mr. Wright admits that both these species occasionally awake and sing in the night, but he says that this early morning singing this ante-Robin singing — is differentiated from the casual night singing by the fact that a second, third, and perhaps fourth bird follows the first singer. This reasoning does not seem to me conclusive, because, for one thing, I am pretty sure I have heard the same thing happen in the middle of the night, and moreover it seems natural to infer that if a considerable period of silence ensues after a first song, then the bird has dropped off to sleep again and has not experienced his actual 'morning awakening.' It may be pertinent to call attention to the fact that Mr. Wright's earliest time of beginning to listen was 2.35 and his earliest Song Sparrow 2.40 and Chipping Sparrow 2.45. If he had himself got out a quarter of an hour earlier, might he not have heard the two sparrows correspondingly earlier also? I also suspect that Mr. Wright's Jefferson Song Sparrows and Chippies may be somewhat exceptionally wakeful birds. My own notes record not a single day when the Chippy began before the Robin and only one occasion when the Song Sparrow preceded the Robin and at the same time came near enough to get into the list at all. That was on June 11, 1885, at West Roxbury, Mass., when the Song Sparrow was heard at 2.55

and the Robin not till 3.05. The Chipping Sparrow that morning did not begin till 3.20, and I am now pretty confident that this early effort of the Song Sparrow's should have been set down as a night song. My average of eighteen records of the Robin, makes his first song at 3.04. Mr. Wright's average of twelve is 3.02, approximately the same, though it should be remembered that the earliest sunrising at Jefferson, N. H., is five minutes earlier than at Boston. My average, therefore, is actually three minutes earlier than his, but the difference is so slight that I think the two may be considered identical. This makes the contrast in our averages for the two sparrows in question the more remarkable. My average of twelve records for the Song Sparrow is 3.17 as against Mr. Wright's 2.56 for the same number; and for the Chipping Sparrow my thirteen observations average 3.21, while his twelve average 2.58.

Mr. Wright notes the hurried manner of the Chipping Sparrow's singing after he gets warmed up to it in the morning. This habit is a striking one, and I do not remember to have seen it mentioned in print before. The trills at that time are much shorter than at other times of the day and follow one another in quick succession with hardly a breath between.

If we assume that my averages of the Song Sparrow's and Chipping Sparrow's beginnings are correct and that the former starts thirteen and the latter seventeen minutes after the Robin, then these two species should appear after the Veery in Mr. Wright's list, as numbers 11 and 12. There are, however, two other species which I am sure Mr. Wright would have accorded earlier places if he had had better opportunities to hear them. One of these, the Kingbird (Tyrannus tyrannus), he himself suspects. observations, coming at 3.22 and 3.24 respectively, seemed to point to 3.23 as a safe assumption for an average, but he admits that "it is not improbable that if other records had been obtained, the Kingbird might rank somewhat earlier in the list." With me the Kingbird ranks next after the Robin. My average of ten records when I have had one in the near neighborhood places it at 3.10. I cannot tell from my own observations just how it would rank in relation to the Alder Flycatcher, the Barn Swallow, the Whitethroated Sparrow, the Wood Pewee, and the Vesper Sparrow, because my records of these birds are too scanty, but reckoned as six minutes after the Robin it would follow the Vesper Sparrow on Mr. Wright's list. On one occasion during the present year I heard the Wood Pewee before the Kingbird and not long after the Robin's beginning.

It may be worth while to call attention to this early-morning song of the Kingbird, for it is a true song but seems to have escaped the notice of most bird-biographers. Though heard occasionally at all times of the day, it is characteristic only of the early morning. It resembles the flight song but is usually given, I am confident, from a perch. At any rate I have often seen the bird singing while perched, and the regular early-morning performance sounds like a stationary one. It is a prolonged, ecstatic, unmusical utterance which introduces a phrase suggestive of the word phabe at frequent intervals among the chattering. I observed a Kingbird in song at 6 P. M., July 16, 1911, at West Roxbury, Mass., and made the following notes on the performance: "He was perched in the top of a tall elm. The song may be written as follows: De-de-de-dedzip'-de-de-de-de-dzee-dzee'-it. The de-de-de part is delivered in a stuttering fashion. Sometimes the stutter and dzip are given twice before the other part, or climax [the phabe part] of the song is given. The song is repeated over and over continuously for an indefinite period. With the dzeeit the tail is spread wide. Sometimes I thought the spreading of the tailed followed the dzeeit immediately instead of being simultaneous with it, but it was hard to be sure of that at the distance I was from the bird. The tail seemed to be spread a little all the time, but the spreading at the climax was abrupt and pronounced. The dzip note is somewhat emphatic but the dzeeit much more so."

The other bird that deserves an early place on the list is among those listed in a group after Mr. Wright's main list, as one that "apparently had not spent the night close by, but came within hearing in an adventitious way." This is the Tree Swallow (Iridoprocne bicolor), for which Mr. Wright has the single record of 4.40. As a matter of fact, the Tree Swallow is one of the very earliest singers in the morning concert. Indeed, I am not sure but he is the first of them all; for, of the three mornings when I have been favorably situated to hear the first of the Tree Swallow's singing.

on May 29, 1904, both that bird and the Robin were singing when I awoke at 2.53: on May 28, 1909, the Tree Swallow was heard at 3.25 and the Robin not till 3.30 (unusually late, probably because it was a cloudy morning with drizzling rain); and on June 4th of the same year the Tree Swallow was singing at 3.03 and the Robin was not heard till 3.07.1 Other observers have noted this habit of early rising on the part of the Tree Swallow. Mr. Ralph Hoffmann, in 'A Guide to the Birds of New England and Eastern New York' states that "near a breeding-site the male may be heard singing before dawn, either from the box, or as he flies to and fro in the darkness." The birds I have heard singing thus have been flying. It is really a remarkable performance regarded as an exhibition of endurance. As I am not aware that it has been described in full, I venture to quote from my journal the notes made May 29, 1904, at Wrentham, Mass. The bird, as stated above, was heard singing when I awoke at 2.53.

He "sang continuously, apparently without interruption, from the time I first heard him till 3.40. The song came and went, as the Swallow flew about over the pond, now nearer, now farther away, now to the right, now to the left, but never stopping,— a constant tsip-prrup, tsip-prrup-prrup, tsip-prrup, tsip-prrup-prrup, tsip-prrup-prrup, varied only by the varying number of bubbling notes following each tsip. The ending of the performance seemed to come gradually. After a period when I heard no song from him,— he may have been singing somewhere out of my hearing, however,— I came upon him, or another of the same species, flying about over the land in full song at 3.56. The song was then kept up till 4.05, when I saw the bird perched high on an oak tree, still singing, but after that he allowed

<sup>&</sup>lt;sup>1</sup> Dr. Charles W. Townsend, in 'Birds of Essex County, Massachusetts,' gives notes on the night singing and morning awakening of the birds on the freshwater marshes of the Ipswich River at Wenham, Mass., in which the singing of the Tree Swallow is recorded. This bird began on May 22, 1904, at 2.58, thirteen minutes after the first Robin song, which was heard at the very early hour of 2.45, the sun not rising on that date till 4.16. Another note, kindly furnished to me by Dr. Townsend, makes the Tree Swallow begin five minutes after the Robin at Ipswich, Mass., June 3, 1906. On June 1, 1906, at Newton Highlands, Mass., Dr. Townsend heard the Kingbird begin singing at 3.08, two minutes after the first Robin. Dr. Townsend, by the way, permits me to say that he agrees with me as to the preëminence of the Robin over the Song and Chipping Sparrows.

his voice short intervals of rest till 4.08, when he flew off and immediately started up the continuous performance again; and I left him still at it." When one considers that not only the voice but the wings are in constant use thus for over three quarters of an hour at a time, one can only marvel at the wonderful energy and endurance of the little bird.

Mr. Wright calls the Crow (Corvus brachyrhynchos brachyrhynchos) "a comparatively late riser" and gives the average time of his first call from fourteen records as 3.44. My average of thirteen records is 3.33, and I suspect that the wildness and comparative scarcity of the Crow in the White Mountain region, as contrasted with its abundance and familiarity in the country about Boston, may account for this difference.

With the exception of the Oven-bird, of which I have only four records, and the Redstart, Black-throated Blue, and Blackburnian, of which I have none, my Warbler observations indicate earlier rising than do Mr. Wright's. For the Maryland Yellow-throat (Geothlypis trichas trichas) my six records average 3.44 as against Mr. Wright's five at 3.51. For the Black and White Warbler (Mniotilta varia) I have two records averaging 4.03, while Mr. Wright's single one was at 4.04. Three records for the Blackthroated Green Warbler (Dendroica virens) give an average of 3.38, as against Mr. Wright's average of 4.13 for the same number. For three other species I have only single records made at Hurd Pond, near Mt. Katahdin, Maine, June 27, 1897. These are rather surprisingly early. They are: Myrtle Warbler (Dendroica coronata). 3.03 (Mr. Wright's average of three is 4.25); Nashville Warbler (Vermivora rubricapilla rubricapilla), 3.04 (Mr. Wright's average of two is 3.53); and Magnolia Warbler (Dendroica magnolia), 3.09 (Mr. Wright's average of seven is 3.55). This morning at Hurd Pond was fine and calm; the light first showed in the east at 2.15, and the rays of the sun struck the farther shore of the pond at 3.58.1 About 13 minutes should be added to the Hurd Pond

<sup>&</sup>lt;sup>1</sup> It may be of interest to record the other awakenings noted at Hurd Pond on this date. In the order heard they were: Olive-backed Thrush (Hylocichla ustulata swainsoni), 2.52; White-throated Sparrow (Zonotrichia albicollis), 2.52; Herring Gull (Larus argentatus), calling, 2.57; Olive-sided Flycatcher (Nuttallornis borealis), calling, 3.05; Golden-crowned Kinglet (Regulus satrapa satrapa), 2.54.

figures for purposes of comparison with Mr. Wright's, in order to allow for the earlier sunrise at that latitude and longitude, than at Jefferson, N. H., just as five minutes should be subtracted from my records made in the neighborhood of Boston to allow for the later sunrise there.

Another early-rising warbler, which Mr. Wright has not recorded, is the Yellow Warbler (*Dendroica æstiva æstiva*). My average of five records is 3.24.<sup>1</sup> It will be seen that I cannot from my own experience endorse Mr. Wright's conclusions as to the late awakening habits of the Warblers as a family.

These remarks of mine are not to be taken as in criticism of Mr. Wright's admirable paper, which he clearly states to be the result only of his own records and individual experience in a single locality. They are intended, rather, to be supplementary to his records and conclusions, and they may serve to emphasize the fact that more observations from a number of different localities are needed in order to enable us to generalize with safety upon this subject of the Morning Awakening. For myself, I will simple say in recapitulation that, so far as my own observations show, the Song and Chipping Sparrows are much later risers than the Robin, the Kingbird is one of the very earliest of the early birds, the Tree Swallow is still earlier and may be the earliest of them all, the Crow is not a late riser, and neither are the Warblers as a family.

<sup>&</sup>lt;sup>1</sup> Dr. Townsend has a record of 3.10 for June 13, 1908, at Ipswich, Mass., five minutes before the Song Sparrow and twelve minutes before the Chipping Sparrow.