THE SONG OF THE FOX SPARROW.

The study of the song of the fox sparrow is a highly tantalizing pursuit owing to the bird's brief stay, provoking habits of silence and reluctance to sing in full voice. In three years, taking into account the fall as well as the spring migrations, I have heard them sing scarcely a dozen times, although I have never failed to see them in considerable numbers. Nevertheless, the impression produced by these few occasions is such as to place the fox sparrow among the first vocalists of his family.

The song form commonly heard may be represented by the following:

\[\text{\textbf{A}}\]

\[\text{\textbf{B}}\]

This notation is not ventured with any assurance of perfection for the song is so rapid, so syncopated in its tempo and the tone so sliding and lacking in precision that its reproduction is attended with great difficulties. The matter of pitch presents an insoluble problem. The fox sparrow's pitch is entirely free; he does not sing in the conventional human scale but employs intervals of other dimensions than our whole and half tones, which can not be represented on our musical staff. In trying to reproduce the song there has to be continual slight adjustment and rectification, so that the result is at best only an approximation to the real sounds, more regular and mechanical, less bird-like.

Under these considerable limitations the notes above given may be taken to suggest the song form of the fox sparrow, a theme from which different birds vary a good deal without however departing from the general scheme. The accented high notes in the fourth bar (A) seem to be the musical kernel of the song, for they remain substantially unaltered with different individuals however much the introductory or concluding bars may diverge.
The second theme ($B$) illustrates this variety. I have five or six independent songs among my notes, but every one contains that particular sequence.

The tempo was decidedly rapid, the eight bars not occupying over four seconds in utterance and producing an impression of vigor and dash. During this lively delivery the loudness was noticeably modified. In the common form of the song there was a sharp crescendo on the first two bars to a maximum on the high notes followed by a diminution on the fifth, then a slighter rise and lastly a diminuendo on the final bars. This feature is characteristic of the sparrows and is one of the chief charms of their singing.

The fox sparrow sings, it is clear, a real "tune" with expression and variety, a rapid little melody suggesting dance music of a pastoral character. But were this the only charm to notice he could not be ranked above the song, vesper or field sparrows, and in fact as ordinarily heard the fox sparrow does not produce any impression of superiority. As a rule during the migrations—always, as far as I have observed, in autumn—the fox sparrow sings in a half voice with perfect distinctness, but without volume or resonance. He gives the notes above figured with a somewhat chirping articulation, although never sharply staccato, sometimes twittering and occasionally trilling a little toward the end. Heard when singing in this fashion simultaneously with the song and vesper sparrows he is more flowing but not superior in form and is less brilliant in execution. But let the fox sparrow be moved to use his full voice and the whole song is transformed. Three times only have I heard this happen, but the effect was decidedly startling and it made a lasting impression. On two of these occasions the birds remained in full song for several minutes and from these my observations are taken. In the first place the whole enunciation is altered, the notes are no longer chirped but poured out in a series of full sustained tones which run into one another so that the song becomes a legato warble. The form remains unaltered, the tempo the same, the pitch is not changed but the different delivery makes it seem like a wholly new song. Under this form of utterance the vocal modulation becomes much more noticeable, the crescendo to the high notes and the quick drop after them more effective. It is this feature which gives a decidedly emotional quality to the song. It suggests the human voice for it surpasses in range and suddenness of change anything in the power of a wind instrument.

The voice of the fox sparrow in its full power is clear, sustained and rendered rich by overtones. It has not of course the metallic vibrant ring of the thrushes or the bobolink, it is rather the sparrow or finch voice at its best, a whistle full of sweetness with continual accompanying changes in timbre.
Unlike most of the sparrows the fox sparrow displays an ability to let his notes drop into one another by a quick flexible slide, usually accompanied by a slight change in timbre, which is the characteristic of the warbling birds such as the vireos—in this respect he surpasses all of his race that I have ever heard except the rose-breasted grosbeak and the cardinal.

One of the most interesting circumstances connected with the three occasions when I have heard the full song was the fact that each time opportunity was abundantly given for direct comparison of the fox sparrow with the strongest singers of the early spring. Not only the song, vesper, field and tree sparrows and juncos were singing, but tufted titmice, Carolina wrens, meadow-larks, cardinals, bluebirds and robins; with all of these the fox sparrow held his own. He quite overpowered the other sparrows by his vocal strength and surpassed the wren and titmouse in musical form. Only the meadowlark, robin and cardinal were noticeably louder and of all the singers only the cardinal, meadowlark, wren and bluebird were comparable in sweetness and richness of tone. The bluebird came the nearest in quality. One of them perched not thirty yards from the sparrow and sang vigorously as if in answer or rivalry. The two songs were not wholly unlike in warbling character and bore much resemblance in timbre but the sparrow was undeniably sweeter, more sustained, more elaborate and more vivacious.

As compared with the wren or cardinal the sparrow was less round and clear in his tones but was equally spirited and musically much more interesting. To match him in all respects one would have to induce a rose-breasted grosbeak to sing the vesper sparrow's theme: to surpass him one would have to call upon one of the major singers, the thrasher, the bobolink or the thrushes.