

The fact that Red-winged Blackbirds, in some cases in flocks of considerable size, spent the early winter in southern Wisconsin, may also have some bearing on the Starling's arrival as they are known to wander about together at times.—HERBERT L. STODDARD, *Public Museum, Milwaukee, Wis.*

The Starling (*Sturnus vulgaris*) Breeding at Hatley, Quebec.—

Undoubtedly this is the first recorded instance of the Starling breeding in the Province of Quebec, and perhaps also in the Dominion of Canada. The first bird to invade the village of Hatley was noticed by me at 5.30 p.m. on April 14, 1923. Five days later, I saw it again near the same spot, and then lost sight of it until the 29th. On this latter date, it was in the company of a mate, both birds allowing of a near approach, whilst feeding on the ground in a field at the back of St. James' Cemetery. I visited this spot several times without results, until May 17, when one of the birds was seen to rise off the ground with food in its bill, and fly direct for the spire of St. James' Church. I watched it through my glasses, and noticed that it entered the base of the hollow round wooden ball at the top of the spire (on which a cross once stood), thereby revealing the whereabouts of its home. Poor old English Starling! you never asked to be imported into the United States, but you did well when first visiting Hatley to seek the sanctity of a church, where so far as I am concerned you are immune. Even if I took toll of you, what would it amount to, seeing that you have made up your mind to invade Canada, as will be gathered from the following records, viz.:

1919, St. Catherines, Ont., Mrs. R. W. Leonard, small flock during winter.

1920, Aug. 24, Toronto, Ont., J. H. Fleming, flock of seven.

1921, May 15, Port Stanley, Ont., E. M. S. Dale, three along lake front.

1922, March 11-12, Magog, Que., F. Napier Smith, one (taken).

“ Apr. 19-20, Arnprior, Ont., Chas. Macnamara, one (taken).

“ Port Stanley, Ont., E. M. S. Dale, again reported during the summer.

“ Sept. 29, Wheatley, Ont., W. E. Saunders, three.

“ Oct. 22, Aylmer, Ont., seven.

1923, Feb. 18, London, Ont., E. M. S. Dale, seventeen (several taken).

“ Apr. 14-May 31, Hatley, Que., H. Mousley, two (breeding).

1923, Apr. 21 and later, St. Lambert, Que., L. M. Terrill, three.

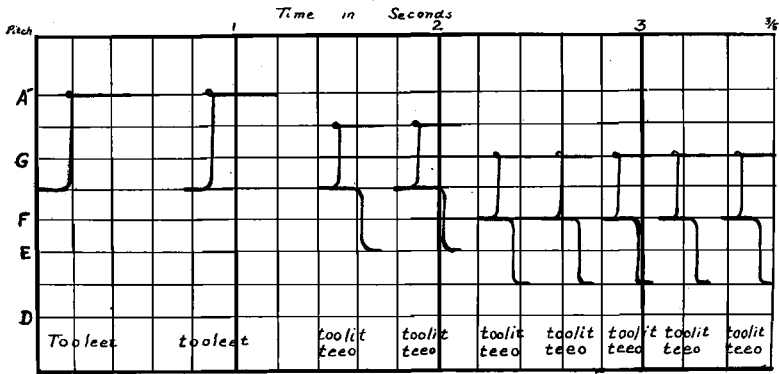
St. Lambert the most northerly station so far recorded, is about 325 miles north of New York City, the point of liberation of the Starling in 1890.—HENRY MOUSLEY, *Hatley, Que.*

A Double Song of the Cardinal.—In studying the details of bird songs one frequently finds cases where birds sing notes that are on two distinct pitches. In most cases one pitch is louder than the other or heard only from certain positions, which leads one to suspect that it is merely the effect of overtones. In the summer of 1921, however, I heard

a song from a Cardinal that contained double notes, where the double was so distinct and clear that it could not have been due to overtones.

The locality was Limestone Brook in the Allegany State Park, Cattaraugus County, New York. On July 23, I was much astonished to find a pair of Cardinals. I had just been looking at Juncos and Magnolia Warblers and listening to the songs of Hermit Thrushes, so that the mere presence of this southern bird among northern species was an event worth recording. Wishing to make the male sing I began whistling bits of Cardinal song as I remembered them, and though the imitation was far from perfect it accomplished its purpose. The bird was soon not ten feet over my head and whistling at its best.

I recorded, one after another, six different songs. The bird obligingly repeated each one frequently enough so that I could get it accurately and test the pitch and time of each portion. The presence of clearly marked consonant sounds in the song was characteristic. I have previously explained how I represent liquid consonant sounds by the graphic method ('Auk,' XXXII, p. 179). Other consonant sounds, that are less common in bird music I represent by writing beneath the record the syllables that the bird actually seems to sing.



DOUBLE SONG OF THE CARDINAL

Among the six songs was one that I had written "Tooleet tooleet toolit toolit toolit toolit toolit toolit toolit," and another "Teo teo teo teo teo teo teo." Suddenly the bird put these two songs together singing them both at once in perfect harmony. The first two or three times that the bird did this I was unwilling to believe what I had heard. Several times I thought my ears had deceived me, but when I listened again there were the two songs together, sounding just as though two birds, a soprano and contralto were sitting side by side and singing a duet. The bird sang this double song over and over as if to convince me that it really could do

it. As the record shows the song opened with two single "toolet" notes. Then the "teeo" part joined in with the "toolit." The phrases began on the same pitch, but the "toolit" slurred upward and the "teeo" down. The "toolit" contained a liquid consonant sound, but the "teeo" did not. Perhaps most wonderful of all the "toolit" phrase remained on the beginning note a shorter time than the "teeo." Neither song was louder than the other and there was no suspicion that one could be an overtone of the other.

It must be physically impossible for a single vibrating organ to produce two distinct sounds at once unless one is an overtone of the other. I would therefore infer that the Cardinal has two or more vibrating organs in its throat and is capable of using each independently of the other. Whether this is a common phenomenon of the Cardinal song or this individual was an unusual bird I do not know, having little acquaintance with the song of the Cardinal as a species. Perhaps someone who lives in the range of this bird and has a more intimate acquaintance with its song could settle this question.—ARETAS A. SAUNDERS, *Fairfield, Conn.*

Dickcissel in Central Park, New York City.—The noon hour of October 4, 1922, found me on the top of a steep rock, looking down into a certain grape vine tangle on the edge of the Lake in the Ramble. Fourteen years ago I flushed a Horned Owl out of this very tangle, and ever since have religiously peeked into it in the fatuous hope that lightning would strike a second time in the same spot, and that another rare bird would be discovered. On the day in question a flock of English Sparrows seemed an inadequate return for my efforts, but one started working its way upward, and finally emerged on top to view the scenery. It was pure chance which caused me to put my glasses on it, revealing a yellow breast dark loral streaks, and a bay patch on the bend of the wing. I was so astounded at beholding an adult female Dickcissel in winter plumage, that I almost fell off the rock into the lake. A few minutes' study of a bird with which I was previously thoroughly familiar in life, and I rushed back to the Museum to secure witnesses of so improbable an occurrence, as the locality made collecting out of the question. Most fortunately my ever obliging friend, Mr. J. T. Nichols, who also knew the bird well in life, consented to return with me. A half hour's search, and we found it with a flock of English Sparrows in a patch of rag-weed. It seemed to have absorbed the tameness of the Sparrows, as we were able to observe it at leisure on the ground in bright sunlight at a distance of fifteen feet. Perhaps few students of the Atlantic Coast realize the astonishing resemblance of this bird in fall plumage to the female English Sparrow. With a front view, of course, the yellow breast and loral streaks are very noticeable, but the bay at the bend of the wing is only visible at very close range. I do not believe the two species could be separated on a back view in life. The harsh "cack" of the Dickcissel is, of course, very different from the "cheep" or chatter of the Sparrow. Our bird was in sleek, unfrayed plum-