

EARLY SUMMER HORIZONS FROM MILTON TOWNSHIP, DUPAGE COUNTY, ILLINOIS.

With a desire to respond to our editor's request for "June horizons," and also to ascertain in a measure the standing of our breeding birds, a number of trips were arranged by the writer in June, and one during July, of the present season of 1899, to widely separated parts of this township. A few late May records taken at Glen Ellyn were also thought desirable to include as well.

Briefly, the County of DuPage may be described as a prairie county, rolling generally in character; this marked feature of its make-up perhaps reaching its best development right here in Milton, the most central of its townships. The drainage of this particular locality lies chiefly in the direction of the East DuPage, a now rather insignificant stream flowing in a southerly course from here, but doubtless of no little importance during the early period of its career. The valley proper of the East DuPage is rather depressed and from one-eighth to nearly a mile wide in places. This statement may be repeated when referring to the West Branch of the DuPage River, and will also hold true to a certain extent with Salt Creek, a tributary to the DesPlaines River, a few miles to the eastward of Glen Ellyn.

The surface of the entire county, the geologists tell us, is of Morainic origin, being fully attested to and well illustrated in the sedimentary and gravelly ridges bordering the streams. There are also other evidences of the drift, or ice period, at hand in the numerous surface boulders distributed here and there throughout the entire section. In addition to the smaller creeks tributary to the river and its branches, there are several systems of disconnected sloughs, each trending in one or another direction towards the natural drainage outlets, and marking the courses at present of all that now remains of ancient glacial feeders.

The forest growth of this section, somewhat sparse, is in the main confined to these several ridges and elevated flats bordering the streams and at the present time made up of detached groves, owing to much of the original woodland having been cut into and materially reduced and changed in area during the time in which the county has been settled. Still when we take into consideration the orchards, hedges and shade trees,

now scattered quite regularly throughout the cultivated tracts, it is questionable if the county does not contain now a larger tree growth on the whole than when the same lands were held by the Indians or during the period of frequent prairie-fires.

The village of Glen Ellyn is located in and bordering on one of these groves, and from the hilly, wooded and generally picturesque character of the country in its immediate vicinity, has been likened by some to a wooded oasis situated among fertile but otherwise uninteresting fields. This latter statement, however, may appeal to some, but not altogether to the naturalist, for we all appreciate the agreeable change at times from wood-land to fields and vice versa. Within the village limits is an artificial lake of some dimensions, covering perhaps thirty acres and more—an attractive spot for passing water-fowl in season.

Our spring and fall migrations will average each about 130 species, with a summer or breeding list of one-half that number.

A trip on the 18th of June took me to Mitchell's woods in section 34 at the southern end of the township, passing through sections 11, 15, 22 and 27, thence through sections 35 and 36 to the Lisle woods and then north along the creek (as we call the East Branch of DuPage River) through sections 25, 24, 13 and 14 home. A late start, at 9 A. M., was made and the day being fair and warm (94° at 2 P. M.) not as many individuals and possibly species, were recorded as would otherwise have been the case had an earlier start been made and the day cooler. My trip took me south through the fields and following up a system of sloughs. Within a short distance from my home the following were recorded, viz. :

Mourning Dove, 2. Meadowlark, 2. Bronzed Grackle, 1. Martin, 6, White-rumped Shrike, 1. 12 in all.

In hedges and fields adjoining the village : Mourning Dove, 2. Flicker, 1. Wood Pewee, 1. Prairie Horned Lark, 5. Bobolink, 13. Meadowlark, 3. Bronzed Grackle, 4. Goldfinch, 2. Song Sparrow, 1. Dickcissel, 5. White-rumped Shrike, 3 (one adult followed by two young). Warbling Vireo, 1. Brown Thrasher, 3. 44 in all.

In fields between Glen Ellyn and Mitchell's woods, the species from now on being given as listed and without any attempt at classification, viz. : Flicker, 1. Robin, 2. Red-winged Blackbird, 6. Song Sparrow, 1. Bronzed Grackle, 4. Red-winged Blackbirds, in sloughs Nos. 33 and 4, 10 males. King Rail, calls, 1. Bartramian Sandpiper, 3. Long-billed Marsh Wren, 2 in slough No. 4. Also Red-winged Blackbirds feeding young out of nest, 4. Red-winged Blackbirds in slough No. 5,

10. Black-crowned Night Heron, 1 in slough No. 6. Several Dickcissels, 3 near by and one Bartramian Sandpiper, 1. Flushed two King Rails here, 2. Five more Dickcissels in same locality, 5. Also six Bobolinks, 6. Total 62.

Approaching Mitchell's woods: Crow, 10. Grasshopper Sparrow, 1. Vesper Sparrow, 1. Field Sparrow, 1. Scarlet Tanager in song, 1. Cowbird, 1. And my old favorite, which I have not recorded in two seasons past, the Lark Sparrow, 1. Total 16.

In Mitchell's woods, 12 to 1 P. M., while resting and eating lunch, the following heard: Indigobird, 1. Oven-bird, 2. Red-eyed Vireo, 5. Total 8.

Passing hurriedly through these woods, the following heard or seen: Kingbird, 2. Flicker, 1. Catbird, 1. Blue Jay, 1. Crow, 5. Wood Pewee, 1. Total 11.

Approaching the creek-bottom, I had occasion to cross a wet, grassy place, and found there two Savanna Sparrows chipping near me, each with food in its bill and evidently the parents of young close at hand. Four Barn Swallows, 4, were seen here passing back and forth over the same ground and also over the creek close by. As the day was very warm at this time quietness reigned along the creek, two Crows, 2, only being seen. Near the Lisle woods I heard the Bluebird's call, 1. In the creek-bottom, Song Sparrows, 3. Another Savanna sings, 1, and three Maryland Yellow-throats, also in song, 3. Bobolinks again to the number of 5. Catbird on nest beside its mate, 2, in cornus, willow and wild grape-vine thicket bordering the creek. An Alder Flycatcher, 1, seen here, and one Indigobird in song, 1. Total 25.

Going hastily through the Lisle woods the songs of many (at least ten) Red-eyed Vireos were heard on all sides, and several Indigos (six at least) greeted me. Four more Crows, 4. Red-shouldered Hawk, 1. Blue Jay, 3. Crested Flycatcher, 1. Three Black-crowned Night Herons, 3, (one young among them) flushed from button-bush swamps. A Green Heron, 1, calls near by in those notes which so much resemble the casting down of rail-road track iron in the distance. Downy Woodpecker, 1. Scarlet Tanager, 2, in song. Yellow-billed Cuckoos, 2, call. Red-headed Woodpecker, 2. Ovenbird, 2. Total 38.

Journeying northward along the river, little attention being given to several small groves of timber through which I passed, the birds of the marsh and field again being my specialty. Dickcissel, 8. Grasshopper Sparrow, 1. Savanna Sparrow, 3. Brown Thrasher, 1. Black-crowned Night Heron, 1. Henslow's Sparrow, 1. Meadowlark, 5. Bobolink, 2.

Bartramian Sandpiper, 1. Short-billed Marsh Wren, 2. Flicker, 4. Goldfinch, 2. Crows, a flock of 33 on fence near the creek. Maryland Yellow-throat, 4. Song Sparrows, 3. Crows again to the number of 5. King Rails call, 1. Long-billed Marsh Wren, 2. Kingbird, 1, and a roost of about 300 Blackbirds made up in the greater part of Red-wings and a few Bronzed Grackles (six being seen) in slough, the birds still coming in at 7:30. Seven Barn Swallows, 7, seen here, and at dusk two Vesper Sparrows, 2, in song. Total, 395.

On the evening of June 21st during fifteen or twenty minutes spent at our lake, the following were seen or heard: Kingfisher, 2. Black-crowned Night Heron, 1. Green Heron, 1. Baltimore Oriole, 1. Song Sparrow, 1. Scarlet Tanager, 1. Catbird, 2. Blue Jay, 3. Swift, 3. Martin, 6. Barn Swallow, 7. Wood Thrush, 2. Total, 30.

A business trip on the 26th of June took me to the north-eastern corner of the township. Time 3 to 5 P. M. The borders of one small grove visited besides cutting through the woods at east side of village. Aside from this what was recorded was observed from the highways. This trip took me through sections 11, 1 and 2 with results as follows: Wood Pewee, 3. Indigo, 7. Red-eyed Vireo, 2. Kingbird, 3. Song Sparrow, 7. Dickcissel, 8. Catbird, 8. Vesper Sparrow, 2. Mourning Dove, 10, and at least 35 at Ackerman's cattle-yard, where much corn in the ear was scattered upon the ground. Bobolink, 6. Red-winged Blackbird, 15. Flicker, 2. Red-headed Woodpecker, 1. Warbling Vireo, 1. Bronzed Grackle, 4. Robin, 6. Bartramian Sandpiper, 2. King Rail, 1. Yellow Warbler, 3. Blue Jay, 4. Goldfinch, 1. Crested Flycatcher, 1. Maryland Yellow-throat, 3. Crow, 6. Rose-breasted Grosbeak, 2. Baltimore Oriole, 1. Grasshopper Sparrow, 2. Total, 147.

June 29th I went to Chicago on business but returned home early in the afternoon, and having a little time to spare, it was put to good advantage in the fields north-west of the village. No timber lands were inspected on this trip, barring a few osage-hedges and some isolated clumps of willows and one of young basswood trees. Sections 10, 9, 4 and 3 were crossed over. Time 4 to 8 P. M. Within the corporation limits the following were noted: Dickcissel, 9. Meadowlark, 5. Bobolink, 4. Mourning Dove, 6. Grasshopper Sparrow, 3. Goldfinch, 2. Red-winged Blackbird, 11. Robin, 3. Kingbird, 1. Song Sparrow, 1. Bartramian Sandpiper, 2. Crow, 4. Bronzed Grackle, 4. Prairie Horned Lark, 2. Black-crowned Night Heron, 1. White-rumped Shrike, 1. Total 59.

In fields beyond, one small slough and some low meadow-land

visited: Dickcissel, 15. Meadowlark, 15. Robin, 1. Bobolink, 14. Mourning Dove, 7. Bartramian Sandpiper, 11. Crow, 3. Bronzed Grackle, 5. Prairie Horned Lark, 6. Black-crowned Night Heron, 5. White-rumped Shrike, 4 (two of which young in care of parents). Warbling Vireo, 1. Red-headed Woodpecker, 1. Flicker, 1. Swift, 1. Red-winged Blackbird, at least 45. Barn Swallow, 20. Henslow's Sparrow, 2. Grasshopper Sparrow, 5. Alder Flycatcher, nest and 4 eggs in clump of small basswoods growing on the top of a gravelly knoll near a low meadow containing small bunches and single willows of such species as *S. nigra*, *amygdaloides*, *longifolia* and *discolor*. Both birds were seen besides two others which were afterwards heard in an osage-hedge while on my way home, 4. Yellow-billed Cuckoo, 1. Wood Pewee, 1. Yellow Warbler, 1 juvenile. Kingbird, 4. Total, 173.

July 2nd, I visited a portion of the Lisle woods not inspected on my previous trip, some time being spent among the willow-thickets along the creek. A heavy thunder shower prevented much work in the woods. On starting out several Red-eyed Vireos, 4. Indigobirds, 3. Crested Flycatchers, 2. Towhee, 1. Wood Pewee, 1. Scarlet Tanager, 1. Goldfinches, 5, were heard in our own woods.

In Woods and fields along the way the following noticed: White-rumped Shrike, 1. Vesper Sparrow, 1. Bluebird, 2 juveniles. Henslow's Sparrow, 1. Black-crowned Night Heron, 2. Alder Flycatcher, 4.

While lunching in a thicket of willows the following heard: Savanna Sparrow, 1. Song Sparrow, 1. Kingfisher, 2. Maryland Yellow-throat, 1. Dickcissel, 2. Catbird, 1. Meadowlark, 1. Alder Flycatcher, 1.

Along the creek the following seen or heard: Savanna Sparrow, 8. Flicker, 4. Song Sparrow, 1. Prairie Horned Lark, 3. Black-crowned Night Heron, 3. King Rail, 1. Long-billed Marsh Wren, 1. Short-billed Marsh Wren, 1. Henslow's Sparrow, 3. Maryland Yellow-throat, 3. Yellow Warbler, 2. Barn Swallow, 5. Total, 73.

In woods, many Red-eyed Vireos, (six at least). Crested Flycatcher, 1. Indigo, 3. Oven-bird, 1. Field Sparrow, 4. Towhee, 1. Red-tailed Hawk, 1. Returning home over same ground, no record kept of birds heard or seen beyond an additional Kingfisher at the creek. Total, 18.

The notes for late May refer to a few records made here on Decoration Day. Such for example as the Yellow-breasted Chat, 1. Prairie Hen, 1. Bartramian Sandpiper, 1. Black-crowned Night Heron, 2. Bittern, 1. Red-shouldered Hawk, 1. Indigo, 6. Catbird, 4. Scarlet Tanager, 3. Rose-breasted Grosbeak, 3. Baltimore Oriole, 4. Maryland Yellow-

throat, 1. Yellow Warbler, 1. Cedarbirds, a large flock of not less than 100. Mourning Dove, 1, with nest on ground in hay-field. Bobolink, 2, with nest on roadway. Total, 134. All within the village limits but not including anywhere near the number of species observed on that day, little time on the whole being given to birds.

These lists give without a doubt a tolerably fair estimate of our local ornithology during the period of reproduction or early summer months—that is, in a rough way, for as is well known quite a number of forms not given here are known to nest within our limits. Indeed, the village of Glen Ellyn proper could furnish a half dozen such additional species and which easily could be augmented by special trips in quest of them to the neighboring parts of the township.

Such notable examples for instance are the Pied-billed Grebe, Least Bittern, Virginia and Sora Rails, Spotted Sandpiper, and possibly Killdeer, Hairy Woodpecker, Phoebe, Green-crested Flycatcher, Least Flycatcher, Chipping Sparrow, Yellow-throated Vireo, Redstart, House Wren, White-breasted Nuthatch and Chickadee.

The grand total of the number of units or individuals actually heard or seen on these several trips is 1245, and from which it is thought allowable to make the following deductions. But for our purposes of calculation we will call it in round numbers 1200. Of the thirty-six sections the county contains, fifteen of these were visited, my path not being doubled excepting in the last three trips where corresponding allowances were made. It is figured that my field of observation would naturally cover at least four acres at each notation, or twenty to each section; or, in other words, one-eighth of each section was gone over by these observations.

If twelve hundred individuals were the sum total in covering one-eighth of the territory represented by fifteen sections, a completed estimate of the entire field, based on the above calculations, would therefore yield 9600 individuals, or one-fifteenth of that, 640 to each section, which in my opinion is not only a low estimate, of the number of birds that should possibly be recorded, but is fifty per cent. less than should really exist there, for the reason that my notes are confined almost entirely to the seeing or hearing of male birds alone, therefore the females and young are not taken into consideration thus far. Multiplying the 640 by 2 we have 1280 adult birds for each section, and 36 times this the magnificent showing of 46,080 for the entire township, or 414,720 for the whole county, which is made up of nine townships.

Yet this is not all; for, as has been said, these estimates affect only the

adult bird population. Dividing the net result given us thus far equally we have 207,360 pairs nesting within our limits; and, as the successful rearing of at least *two young* for each pair of adults must be regarded as averaging very low—the species simply reproducing itself—the summer or breeding census of DuPage County cannot fall very far short of one million birds.

That these figures are extremely conservative I have not the slightest reason to doubt, and still on the whole the writer is not prepared to say that "figures will not lie." Take our place of two and sixty-five hundredths acres for example and on which it was found that the following species nested the past season, viz. : Mourning Dove, 1 pair; Chimney Swift, 2 pairs; Kingbird, 1 pair; Blue Jay, 1 pair; Baltimore Oriole, 1 pair; Bronzed Grackle, 1 pair; Song Sparrow, 1 pair; Purple Martin, 14 pairs; Catbird, 1 pair; Robin, 3 pairs and House Sparrows, 2 pairs, or twenty-eight pairs all told, which means that they necessarily must have reared not far from one hundred young.

Just beyond the confines of our place and possibly within an area of ten acres our list could easily be increased by the addition of several pairs of at least six of the species above given, and, also in addition, several others that are not herein listed, as for example, the Red-headed Woodpecker, 1 pair; Flicker, 1 pair; Wood Pewee, 1 pair; Meadowlark, 1 pair; Vesper Sparrow, 1 pair; Rose-breasted Grosbeak, 1 pair; Scarlet Tanager, 1 pair; Warbling Vireo, 1 pair; Yellow Warbler, 1 pair; Brown Thrasher, 1 pair, and Bluebird, one pair.

And still there are other facts that cause me to regard the foregoing figures as extremely low and which can be explained in part by the almost entire absence of several species otherwise known to be common and among which could be named the Red-headed Woodpecker, Chimney Swift, Prairie Horned Lark, Cowbird, Goldfinch, Towhee, Brown Thrasher and Robin which do not show up in anywhere near their normal numbers in the preceding lists. Neither does this take into account our large alien population of *Passer domesticus*.

However approximate these figures may be they are considered never-the-less as a very excellent showing for a county of which fully eighty per cent. is cultivable farming lands and where not more than one-half of the remaining twenty per cent.—perhaps nearer six per cent. of Milton Township—taking into consideration orchards, hedges, etc., is occupied in any form as woodland.

It is well enough to add further that DuPage County is among the smallest counties in the state.

The following is a list of the birds given, as occurring in these horizons, with numbers opposite each, viz. :

Bittern, 1.	Savanna Sparrow, 15.
Green Heron, 2.	Grasshopper Sparrow, 12.
Black-crowned Night Heron, 19.	Henslow's Sparrow, 7.
King Rail, 6.	Lark Sparrow, 1.
Bartramian Sandpiper, 21.	Field Sparrow, 5.
Prairie Hen, 1.	Song Sparrow, 19.
Mourning Dove, 63.	Towhee, 2.
Red-tailed Hawk, 1.	Rose-breasted Grosbeak, 5.
Red-shouldered Hawk, 2.	Indigo Bunting, 27.
Yellow-billed Cuckoo, 3.	Dickcissel, 55.
Belted Kingfisher, 5.	Scarlet Tanager, 8.
Downy Woodpecker, 1.	Purple Martin, 12.
Red-headed Woodpecker, 4.	Barn Swallow, 43.
Flicker, 14.	Cedar Waxwing, 100.
Chimney Swift, 4.	White-rumped Shrike, 10.
Kingbird, 11.	Red-eyed Vireo, 27.
Crested Flycatcher, 5.	Warbling Vireo, 3.
Wood Pewee, 7.	Yellow Warbler, 7.
Alder Flycatcher, 12.	Ovenbird, 5.
Prairie Horned Lark, 16.	Maryland Yellow-throat, 15.
Blue Jay, 11.	Yellow-breasted Chat, 1.
Crow, 72.	Catbird, 18.
Bobolink, 52.	Brown Thrasher, 4.
Cowbird, 1.	Short-billed Marsh Wren, 3.
Red-winged Blackbird, 401.	Long-billed Marsh Wren, 5.
Meadowlark, 31.	Wood Thrush, 2.
Baltimore Oriole, 7.	Robin, 12.
Bronzed Grackle, 28.	Bluebird, 3.
Goldfinch, 12.	Total, 1245.
Vesper Sparrow, 6.	

BENJ. T. GAULT, *Glen Ellyn, Ill.*

A HUMMINGBIRD'S NEST.

It was on Sunday, the 4th day of July, two years ago, that we discovered our first Hummingbird's nest. It was a mere bunch of plant down,