

there was something of importance to be done in a scientific way besides the making of a collection, is significant. Only a few years later Lawrence, who up to then had published nothing, began to issue the first of the long series of ornithological papers and descriptions of new species which made him famous. Audubon at this time must have dominated the ornithological field, and perhaps Giraud, in launching out on his own account, did even more by his example, to advance ornithological science than by the actual value of his publications.

FURTHER NOTES AND OBSERVATIONS ON THE BIRDS OF HATLEY, STANSTEAD COUNTY, QUEBEC, 1918.

BY H. MOUSLEY.

In the present paper I propose to adopt the same principle as in my previous one (Auk, Vol. XXXV, 1918, pp. 289-310), *i. e.*, of first giving a general account of the season, following this up with an annotated list of the five new species added during the year while carrying on the numbering from where it left off in 1917.

In addition to these five new species, the breeding list has been increased from seventy-seven to eighty-three species, the six new ones, whose nests, eggs or young had not been previously taken, being the Virginia Rail, Ruby-throated Hummingbird, Wood Pewee, Purple Finch, Bay-breasted Warbler and House Wren, whilst circumstances point to the fact of the Olive-sided Flycatcher, Cape May Warbler and Golden-crowned Kinglet having bred also, so that a dagger may now be added to their names in the list already given of the birds to be found at Hatley, as well as a star to the above-mentioned six species.

Now on reference to the above paper it will be seen that the months of November and December, 1917, had been conspicuous for the almost entire absence of winter birds, and as the intense cold

still prevailed during the first few months of 1918 it hardly seemed likely that I would obtain any early records, and yet how often the unexpected happens. The last few days of 1917 had seen the thermometer down to as low as minus twenty-two degrees, with a rise, however, in the New Year on January the second, to zero. On the ninth of this month a Brünnich's Murre was picked up to the south of the village in an exhausted condition, dying the next day. This bird no doubt had been driven in by the easterly gales that raged in the early part of December, as two others were obtained (as already recorded) about the middle of that month at North Hatley. It was mounted by Mr. Greer for its captor, Mr. Will Hunter of Hatley, and weighed 1 lb. 6 oz., being in an emaciated condition. From the ninth to the twenty-fifth nothing was seen except a few small flocks of Snow Buntings, but on the latter date a Northern Shrike paid a visit to my garden, and I think took toll of an English Sparrow. A few days previous to this or, to be precise, on the twenty-second, I was looking over some birds at Mr. Greer's, and had the pleasure of identifying a Ring-billed Gull which was then in the flesh. The bird had been taken in a marsh adjoining Lake Massawippi, and not so far from the village of the same name, somewhere about the ninth of December, it having been driven in also, no doubt, by one of the severe easterly gales already referred to. The bird, which was to be mounted for Mr. E. H. English of Massawippi, was a young one, apparently in the first winter plumage, being irregularly mottled and with other immature traces besides. It has already been recorded in 'The Auk,' Vol. XXXV, 1918, No. 2, p. 241.

Nothing further of interest occurred until February 25, when the first Crows were heard, this date forming a record one, as my previous earliest was March 1, 1915 and 1917. On the last day of the month a large flock of Snow Buntings was observed, also two Prairie Horned Larks, this date being just two days ahead of any previous year.

More than a week now elapsed before the first real surprise came in the shape of a rosy male Purple Finch and three females. On March the ninth, or nearly six weeks ahead of the previous earliest record, April 19, 1916. The next arrival was a Robin on the twentieth, and the day following a Bluebird and Song Sparrow, all of

these three being records by just a few days, the most being six in the case of the Song Sparrow.

On the twenty-second another surprise came, a Marsh Hawk and Meadowlark being seen on that day, both of these records curiously enough being twenty days ahead of time, the previous earliest being April 11, 1917, in the case of the former, and April 11, 1915, in that of the latter. Bronzed Grackles and Red-shouldered Hawks were also seen on this date, and the day following a Junco and Red-winged Blackbird, and a Migrant Shrike on the thirty-first, but none of these call for any special notice.

Phœbes, Tree Sparrows, Goldfinches, Savannah and Vesper Sparrows as well as a Sharp-shinned Hawk were seen between April the first, and sixth, and on the seventh I obtained my first spring record for Fox Sparrows, having only seen them in the fall previously. Another surprise came on the eighth, a Flicker being noted ten days ahead of previous records, and on the twenty-fourth I found a Migrant Shrike's nest with five eggs, my previous earliest being May 10, 1916, for a full set.

The month of May was responsible for many interesting items, not the least being the abundance of many of the Warblers, especially the Blackburnian, Black-throated Blue, Black-throated Green, and Canada, as well as a fair sprinkling of the Nashville and a few Northern Parulas. The Tennessee, Pine, Yellow Palm and Wilson's Warblers, however, did not put in an appearance, or at least if they did I failed to detect them, although they were all recorded in the fall migration. It may be interesting in passing to compare my experience with that of Mr. Robert Barbour and others as recorded in 'The Auk,' Vol. XXXV, 1918, No. 4, pp. 484-485; wherein it is complained of the general scarcity of birds this year and especially of the Warblers both at Montclair, New Jersey, and also in Central Park, New York.

Cowbirds were again scarce, and, no instance came under my notice of any Warbler or other species having been victimized. White-crowned Sparrows reverted to the old order of things and were scarce this spring, the only one seen being on the fourteenth in my garden, although in the fall they appeared (for them) in goodly numbers again.

On the twenty-fourth one male Indigo Bunting was seen about

three miles to the north of Ayers Cliff, also four Yellow Warblers as well as a Meadowlark. As regards the latter species, things have not materialized as I had expected, for, although their very early arrival gave promise of an increased number of breeding pairs, I have failed to notice them, in fact the bird mentioned above is the last record for the year so far as my own observation goes, although Mr. Greer saw one on November 12. The pair that nested in the meadow near my house in 1917 failed to do so this year, although they frequented the same ground from March 22 to April 20 and then disappeared, probably to carry out the decree of nature by extending their range in these parts, as they certainly are new birds to the area within recent years. On the twenty-seventh a pair of Warbling Vireos visited our orchard, and I had hopes of their remaining to breed, but they left in the afternoon. Two days later the unmistakable notes of a Whip-poor-will were heard, and on the thirty-first or last day of the month I obtained a male example of a Black-poll Warbler out of an apple tree in our orchard, this elevation being rather over 1,000 feet above sea level. This example made the second only seen in eight years, the previous one being near Ayers Cliff on May 28 of last year as already recorded, the elevation of that locality not being much over half that of the present one.

The advent of June brought high hopes of an abnormal nesting season for Warblers, and such proved to be the case, for never in my experience have I located so many breeding pairs of Black-throated Blue, Black-throated Green, Blackburnian and Canada Warblers. In addition to finding the nests and eggs of all the above (one nest of the Canada Warbler being a beautifully domed example similar in every respect to a miniature Ovenbird's), I also came across those of the Northern Parula, Magnolia, Chestnut-sided and Maryland Yellow-throat.

The greatest red-letter day of all, however, was June 24, when I saw for the first time in summer a pair of Bay-breasted Warblers and later on discovered their nest and set of four eggs. This nest was entirely different from that of any other Warbler I have come across so far, being characterized by its large size and the irregularity of outline given to it by the long coniferous twigs which composed its exterior, some of these twigs measuring $7\frac{1}{4}$ inches.

It was situated in a small fir tree close against the trunk, nine feet above the ground and three feet from the top of the tree, and was composed outwardly of the above-mentioned coniferous twigs as well as grasses, being lined inside with finer grasses and a large quantity of very fine black rootlets. The site was only seven yards from the center of a logging road, and although the nest was in a somewhat exposed position it blended so well with its natural surroundings that I was a long time in finding it. The eggs, which were four in number, were also of a distinctive type and different from any Warbler's eggs that I had hitherto found. The ground color was bluish green spotted with brown, three of them having confluent blotches at the larger end mixed with lilac, while the fourth was nearly evenly marked all over, with no decided zone at the larger end. The average dimensions of the set are .65 x .54, the short length as compared with the width giving them a rather rotund appearance. The dimensions of the nest irrespective of the spread of the coniferous twigs are as follows, viz.: outside diameter $3\frac{1}{2}$, inside $2\frac{1}{8}$ inches; outside depth $2\frac{1}{2}$, inside $1\frac{1}{4}$ inches. Both the nest and set of eggs I presented to the Victoria Memorial Museum at Ottawa.

The locating of a pair of Cape May Warblers from June the eleventh to the twenty-sixth, under circumstances which left no doubt as to their breeding, was also another source of gratification, while the nesting again of the little Northern Parula was no less pleasing. A curious fact in connection with the Cape May and Bay-breasted Warblers was, that I almost failed to detect them during the migration, only one example of the former being noted on May the fifteenth (the following up of which gave me my first specimen of that glorious little orchid *Calypso bulbosa*) and one of the latter on May the twenty-first, so that their subsequent breeding was totally unexpected, and more especially so as I had never seen either of them here before in the summer.

Yellow Warblers were seen on several occasions, more especially near Ayers Cliff, and the same remark applies equally well to the Water Thrush (*Seiurus. n. noveboracensis*). The almost entire absence of Redstarts, at least on the ground over which I ranged, seemed somewhat remarkable, and I did not see many pairs of Chestnut-sided Warblers either. Nashvilles were certainly not as

numerous during the migration as last year, but I noted two or three pairs breeding as against only one last year. Speaking of the nesting of many of the Warblers, it seemed to me that the dates were quite a week or ten days in advance of previous years, a nest of the Black-throated Blue, for instance, containing much incubated eggs this year on June the eleventh, whereas in 1916 a nest found on June the nineteenth contained perfectly fresh ones.

Black-billed Cuckoos were first noticed on the third near our orchard, and I have seen and heard them oftener since than in previous years, with the exception of 1912, when I found three nests. That beautiful songster, the Rose-breasted Grosbeak, of which I have only found one nest so far, certainly bred here again this year, a singing male being located in a large wood throughout the month of June, but its nest escaped detection. In this same wood and period also, a male Scarlet Tanager poured forth his fine notes, and added my own confirmation to that of Mr. Greer's that at rare intervals it may be found breeding here also. The status of the bird in these parts during the years 1836-39 must have been very different from what it is today, for I find that Gosse in his 'The Canadian Naturalist,' 1840 (referred to in the annotated note on the Passenger Pigeon), speaks of having seen many birds in the ploughed fields and pastures at the end of May, one day in particular in his orchard there being scarcely a moment in which three or four might not be seen within a few rods of each other! As a present-day contrast to the above I may say I have never seen more than two together, and my total record for the past eight years consists of six birds only, five males and one female. The Rose-breasted Grosbeak Gosse does not mention at all, so probably it was quite as scarce then as it is now. The number of birds enumerated in the work, however, cannot have been by any means complete, as from a list I have made there appear to be only 67 species recorded as against my 168 at the present time. The Baltimore Oriole apparently was an unknown bird here then, for Gosse distinctly states that he was unacquainted with it; a most striking fact, when we consider that today it is one of the features of almost if not every village. Of the Warblers only two species are spoken of with any degree of confidence, and strange to say they are two of the rarer class, *i. e.* the Blackburnian and Bay-

breasted Warblers, both of which today are still regular migrants if not regular breeders also, at least as regards the first named.

On June ninth and sixteenth I saw a Pine Siskin and had previously seen one on May the sixteenth, a somewhat interesting fact in view of their total absence during the winter, but the same thing occurred in 1917, when on May 31 I shot an example out of a small flock, the birds not having been observed during the winter of 1916-17.

The eighth and eleventh of the month were both red-letter days, for on the former I found the Purple Finch breeding for the first time and on the latter added the Olive-sided Flycatcher to my list, a pair being under constant observation from this date to the thirtieth, and again in the first week of August. My efforts to discover their nest were unavailing, however, although it was evident they were breeding, as on two occasions I observed one of the birds trying to break off small twigs from a tall hemlock tree.

Just previous to the eleventh I flushed a female Ruffed Grouse with her brood of chicks, the only lot seen during the summer.

Shortly after the middle of the month, or to be exact on the twenty-first, I found my first Wood Pewee's nest, but as it was about 12 feet out on a slender bough of a large maple tree, and 25 feet above the ground, I had to content myself with a photograph of its location. The nest was over a fork, and being composed outwardly of lichens it looked exactly like a natural swelling or knot in the branch.

On the twenty-fourth I came across a nest and set of four eggs of the Olive-backed Thrush, this apparently being about my usual yearly allowance. Red-eyed Vireos were more in evidence again, and I came across three or four nests during the month, but none of the Warbling or Blue-headed were found, although I had seen a few pairs of each earlier in the season, and had hopes that it was going to be another "Vireo" year similar to that of 1912. For the next fortnight or until July 15, nothing of particular interest occurred, but on this date a number of immature Golden-crowned Kinglets were observed, this date being three weeks ahead of any previous record, and may possibly be taken as indicative of the birds having bred in the district. Strange to say, they were not noted in the spring migration, although Ruby-crowned Kinglets

were somewhat numerous. On the evening of the twentieth a Catbird was heard "mewing" at 8.45 P.M., this being one of the very few birds observed, the other records being earlier in the season and near Ayers Cliff, where the bird is more usually found than around Hatley. I did not locate a single nest.

Perhaps it may not be out of place to here mention that the following birds have been more than usually numerous, viz.: Chickadees, Goldfinches, Baltimore Orioles, Kingbirds, Purple Finches, and Ruby-throated Hummingbirds, while Red-breasted Nuthatches have been entirely absent, my last record going as far back as October 3, 1917, since which time up to the present date of writing (July 28) I have not seen a single example. Its habits here certainly seem comparable to those of the Crossbills, eccentric, erratic, irregularly sporadic, as the late Mr. Ora W. Knight says of the latter birds in his 'Birds of Maine.'

On the twenty-eighth a young Sparrow Hawk was shown to me in the flesh, which had been shot a day or two before, and the party obtaining it said there were several more, evidently a family party. This evidence further corroborates that of Mr. Greer, who saw the parent birds with young near Waterville last year. The month of August opened auspiciously, for on the first I came across the Olive-sided Flycatcher again, on the outskirts of the same wood where I had previously located it in June, only rather more than a mile to the north of the former spot. I had visited this place purposely, as I was anxious to see whether my House Wrens of August 6, 1917, would return this fall. I did not come across them on this occasion, but three days later or on the fourth I located two of them in almost the identical spot as last year, and also saw the Olive-sided Flycatcher again. The day previously I saw a Prairie Horned Lark, this being the latest date so far that I had noticed the bird in the fall, but later on another example was seen by my son on October the twelfth, he being well acquainted with the bird.

On the tenth I again visited the Wren locality, and had the very great and unexpected pleasure of finding their nest, with four fully fledged young. The site, which was a quarter of a mile or so away from any house, was on the outskirts of the wood already referred to, and the nest was located some eighteen inches down from the top of a small hollow cedar stump, which stood four feet, six inches

above the ground. The inside of this little stump seemed fitted by nature for the home of a Wren, for the branches where they had been cut off from the outside extended through the bark to about the center of the stump, and where two or three came together from opposite sides they formed a natural support, of which the Wrens had taken advantage, not only for the foundation of their nest to rest upon, but also to hold up the dome. The supports of this latter (which was two inches in height, and composed of small fir twigs and some feathers) were sixteen inches down from the top of the stump, the inside diameter of which was $3\frac{1}{4}$ inches. At one side of the dome, of course, there was an aperture allowing the ingress and egress of the birds to the bed of the nest below, which was $2\frac{1}{2}$ inches from the underside of the dome. Below the bed to the foundation supports there was a further space of $3\frac{1}{2}$ inches, which was made up of small fir twigs, pithy chips, feathers and some horsehair for a lining, upon which rested the four fully fledged young. It will thus be seen that the total height of this nest from the foundation to the top of the dome was eight inches, but there will always be a lurking suspicion in my mind as to whether the dome was really intentional or only accidental. It could easily have been the latter, for the supports holding it up may possibly have formed an obstacle to the easy conveyance of materials to the nest below, and so in time a number of twigs may have had to be left behind by the birds, and so have formed an unintentional dome. However, this is one of those little nature problems that are constantly presenting themselves, and of which, as in the present case, there appears to be no immediate solution.

On the fifteenth I had yet another surprise, which enabled me to add one more breeding bird to my list, in the shape of the Virginia Rail, a parent bird of which was seen in a little marsh near Hatley Centre accompanied by her brood of young. This is the second time only that I have come across these Rails, the last occasion being in July, 1915, when I saw two of them in "the marsh" near my house. It is somewhat difficult this year to say exactly when the fall migration of warblers set in, as apparently there was no very decided wave, but I fancy it commenced on August the twentieth; at all events this is the first occasion on which I appear to have any decided increase of entries in my notebook. From this

date, however, to the end of the month things were very quiet again in the Warbler line, and it was not until the first week in September that there was another marked increase. On the twenty-first of August Nighthawks were seen at Ayers Cliff, this being my earliest date for the species, and two days later a Red-breasted Nuthatch was noted, my last record, as already mentioned, dating as far back as October 3, 1917. This day was also memorable, as I was able to add yet another new species to my list in the shape of the Philadelphia Vireo.

On the twenty-sixth, while en route to climb Mount Orford, 2,860 feet, the following birds were noted, viz.: Broad-winged Hawk at Ayers Cliff, Loon and Sora near Magog, and an Osprey near the top of the mountain. All of these birds were of interest to me, the first being new to my list, although it might have been included before, as I know I must have seen the species on two or three other occasions. The Loon I had not seen here before, although it occurs regularly on Lake Massawippi in the fall, while the Sora is an uncommon summer visitant at Hatley, one nest so far being all that has fallen to my lot. The Osprey also up to now had only been noted in the spring migration, one or two having generally paid a visit to "the marsh" for the past four years during the early part of May. Nothing of any particular interest was noticed for the next few days, with the exception of a pair of Pine Warblers and a Yellow-bellied Flycatcher until September the third, when a male Wilson's Warbler was seen at close quarters, and another on the eighth, together with a female, the latter being the first I have seen here so far. On this latter date a Cape May Warbler was also seen, and on the following day an immature Tennessee Warbler was shot, which constituted my first fall record for the species. Another interesting item noted on this same day was an example of the Acadian Chickadee, a specimen of which was obtained a few days later, or on the eleventh, while others were recorded up to the fifteenth, after which they disappeared and were not seen again during the year. On the night of the tenth there was a severe frost, in fact, this has been an abnormal year for frosts, one on the eighteenth and nineteenth of June causing considerable damage to the bean crop. After this last one in September the weather, which had been very dry for several weeks (causing many of the

wells and nearly all the brooks to run dry in August), broke down, and a period of nearly incessant rain set in, which lasted well into the middle of October. This state of things made bird hunting no sinecure, it being next to impossible to locate small Warblers or any other birds for that matter in a downpour of rain. However, I did fairly well considering, as another Broad-winged Hawk was noted on the fourteenth as well as a Yellow Palm Warbler, the only one seen in either the spring or fall migration. The most interesting event, however, was the locating of a few Blackpoll Warblers between the eighteenth and thirtieth of the month, these birds being first noted in the orchard near our house, and afterwards along the roadside, an example on one occasion being taken to insure correct identification. This is the first time of meeting them in the fall, and in the spring, as already stated, only two males have so far been located. The scarcity of this species is an interesting problem to which I have drawn attention in last year's notes. On the afternoon of the twentieth a flock of twenty-six Blue Jays passed at close range. It is not often that one sees so many of these birds together, the greatest previous number I can call to mind being seven. With Robins, however, it is a different matter, for on the twenty-third I saw a large flock, consisting of two hundred or more, which frequented exactly the same locality as they did last year, only the date was rather later then, it being the middle of October. Brown Creepers put in an appearance about now, these little birds being by no means plentiful here. White-crowned Sparrows were also seen on the twenty-third and remained until October 14, being more abundant at this time than in former years. A flock of American Pipits, consisting of seventy-five to one hundred birds, was seen on October 4, but they only remained a few days, being gone by the eighth. Sparrows of all kinds were very plentiful just about now, the Tree and Fox putting in an appearance on the tenth and twelfth respectively. Of the latter I never see very many in a season; possibly half a dozen or so would about be an average. On the fourteenth I returned to my old residence near "the marsh," not having done so at the end of last year, as intimated in my Notes for 1916-1917. For many reasons this has been a considerable advantage, as it has enabled me to form a more accurate idea of the great difference a matter

of only three miles can really make in the bird life of a place, as well as in its flora. The more swampy nature of the country round this latter residence, as I have already indicated elsewhere, has put me in touch with birds and flowers that I rarely and in many cases never came across in my old hunting grounds. Among the birds might be cited the Nashville and Tennessee Warblers, and of the wild flowers the orchids stand out prominently, no less than a dozen new species having been added to my list, which now stands at eighteen, or about a quarter of all the orchids known to occur in eastern North America. My first visit to "the marsh" was paid on October the fifteenth, when six Wilson's Snipe were flushed and one Solitary Sandpiper seen. The conditions existing at this date were very different from those of August the twentieth, when the marsh might be said to be non-existent, there being hardly a drain of water in it, and consequently none of the Limicolae were seen. Now the whole of it was nothing but a sheet of water with no mud beds whatever, the Snipe and Solitary Sandpiper being found in the cat-tails round the margins, where little patches of ground not entirely submerged gave them an opportunity of feeding. Certainly this has been my very poorest year for Sandpiper records, as, with the exception of the above one for the Snipe and Solitary Sandpiper, I have only seen one Greater Yellow-legs, one Least and a few Spotted Sandpipers, and these for the most part were noted during my infrequent visits to "the marsh." The seventeenth saw the last Myrtle Warbler, and I never remember having seen less in the fall than this year.

On the twenty-third a flock of about twenty to thirty Pine Siskins were noted and remained in the district for some little time. Nothing of further interest occurred until November the sixteenth, when the first flock of Redpolls was seen and a week later two small ones of Pine Grosbeaks, one in my garden and the other in the woods three miles away, this latter consisting of seven birds, five of which were highly plumaged males. On the twenty-sixth a large flock of Canada Geese were reported as well as one on the ninth, and I also received a letter from Mr. Greer telling me that he had seen a single female Pine Grosbeak on the twenty-third (the same date as I had observed them) and a flock of eight on the following day, among which were two full plumaged males. He

also informed me that he had seen a Meadowlark on the twelfth and a Crow on the twenty-third, and that a female Merganser had been shot on Lake Massawippi on the sixteenth. The month closed without further incident, and it was not until December the fourth that anything occurred worth chronicling. On that day two more Crows were seen, a rather unusual thing, but brought about by the mild open weather that had prevailed up to this date, the thermometer never having registered anything below zero until the first of the month. On the ninth I received another letter from Mr. Greer, informing me that he had seen a Herring Gull on the sixth, and a flock of fourteen Golden Eyes on Lake Massawippi on the fourth, out of which he and a friend had secured two females. I find Gosse in 'The Canadian Naturalist,' 1840, p. 54, records these ducks as occurring early in March (1836-39) on unfrozen parts of the Massawippi River, which looks as if they are regular although somewhat rare migrants.

On the fourteenth it became very mild, with heavy rain, so that on the following day the fields were green once more, and from this date onward fine open weather continued until the twenty-fourth, when a heavy fall of snow converted what otherwise looked like being a green Christmas into a white one. All through this period, however, and up to the end of the year very few birds were noted, only the usual small flocks of Redpolls, Pine Grosbeaks, and Chickadees being in evidence, with a few Blue Jays and a Pileated Woodpecker on the fifteenth. The other winter birds, such as Evening Grosbeaks, Snow Buntings, Northern Shrikes, and Goshawks, have not put in an appearance, or at least if they have done so I have failed to notice them.

Appended will be found the annotated notes on the four new and one extirpated species added to my list during the past year.

164. *Larus delawarensis* (Ord.). RING-BILLED GULL.—Rare transient. Probably this Gull is merely an accidental transient, blown inland by easterly gales, one of which had been raging in the first week of December, 1917, just previous to an example being taken in a marsh not so very far from Massawippi Railway Station. I saw and identified the bird (which had been kept in a frozen condition) in the flesh while calling upon Mr. Greer on January 22, 1918, and have since seen it mounted ready for its present owner, Mr. E. H. English of Massawippi, who, however,

was not the captor. It was evidently in the first winter plumage, being irregularly mottled, the back showing partly pearl blue, the primaries black, the first one with the white spot near the end, but, of course, no white tip, as in the Herring Gull, the remainder, however, showing traces of these white tips, while the bill had the band of black around it at the angle well developed, as in the adult, the tail, however, still showing immature traces, as the broad black band at the end of it was still there and the feathers were more or less mottled. The exact date of capture is not quite clear, but it was probably December the ninth.

165. **Buteo platypterus platypterus** (Vieillot). BROAD-WINGED HAWK.—Not uncommon transient August 26, September 41, possibly breeds. There is no doubt I have seen this Hawk on some few occasions previous to the above date in August and it might have been included in my list at a much earlier date had I felt disposed to depart from my usual plan of not including any Hawk or Owl unless I have actually handled it in the flesh or seen a mounted example taken in the district, or been in possession of some other equally good evidence to warrant its inclusion. However, on this occasion I had good reason for departing from my usual custom, as Dr. Charles W. Townsend was with me at the time, and being more familiar with the bird was able to verify my identification.

I saw one other example on the date given in September. In the spring they probably pass through between April 15 and May 25 and in some cases may remain to breed, although I have come across no evidence of their having done so as yet.

166. **Nuttallornis borealis** (Swainson). OLIVE-SIDED FLYCATCHER.—Rare summer visitant; May ?, June 11 to August 4.

On the above date in June I was fortunate enough to locate a pair of these birds in a spot ideally suited for breeding. For several days however, I watched them without being able to discover the nest, although I knew they were breeding from their actions. Then a dire misfortune happened, for the farmer who owned the land, being evidently in need of dollars and cents, proceeded to cut down every spruce and fir (for pulp wood) on the ground, in one of which the nest no doubt was, for the birds became restless and uneasy and deserted the spot, and it took me some little time to trace their whereabouts. However, I succeeded at last in doing so, and on June 27 had the satisfaction of seeing one of the birds break off a small twig from a tall hemlock tree, which, however, it unfortunately dropped. Further attempts to break off another having failed, the bird eventually gave up, and I no doubt lost my one and only chance of discovering the site of their second venture, as just at that time circumstances prevented me from keeping a further watch over their movements, and it was only by accident that I came across one of them again on August 1, about a mile from the spot where I had last seen them on June 30. They are interesting birds and not at all shy, and their notes are very varied, the ones uttered when I first came across them sounding like a shrill whistled pi-pee. The more general notes, however, seemed to be 'Whip-you-see,

Whip, whip, Pip, pip,' and 'Pip, pip, pip,' possibly, the 'Whip, whip' ones being the most often used.

167. **Vireosylva philadelphica** (Cassin). PHILADELPHIA VIREO.— Rare transient. August 23. On the above date in August while working through my favorite Warbler wood about a mile to the north of Hatley Village, I was fortunate enough to get a glimpse of one of the above birds, although the view at the time was really so imperfect that had it not been for my good fortune in having Dr. Charles W. Townsend with me at the time, I should hardly have felt justified in making the record public. The Doctor, however, who was some little distance away from me at the time, was fortunate in getting a much clearer view of it than I did, and having seen the bird in life before was in a better position to affirm that it was certainly a Philadelphia Vireo.

From what I saw of it, possibly its smaller size as compared with the other Vireos was the most dominant feature that impressed itself upon my mind at the moment.

168. **Ectopistes migratorius** (Linnæus). PASSENGER PIGEON.— Formerly a summer visitant, but now practically if not entirely extirpated.

During the present year I have been fortunate in securing a book of much local interest entitled 'The Canadian Naturalist,' written by P. H. Gosse and published in London in 1840.

Gosse it appears came to Compton, a village about seven miles to the northeast of Hatley, in 1836 and remained there until 1839. During these three years he wrote a general account of the flora and fauna of the district, which includes the first specific reference as to the dates of the occurrence of the Passenger Pigeon in these parts that I have seen. The book is written in the form (then somewhat prevalent) of a series of conversations supposed to pass between a father and son. The first reference occurs on page 199, where the son asks, "What birds are those flying so swiftly in a small flock?" (the date apparently being about June 10, 1838); to which the father replies as follows, viz.: "That is the celebrated Passenger Pigeon (*Columba migratoria*) and the first flock I have seen this year. They do not appear to make their migrations, as birds in general do, to avoid ungenial seasons, but to obtain in abundance that food which is most suited to their wants; hence their appearances are very uncertain as to time. They are common enough in this country every summer, but I have never seen anything like the innumerable hosts of pigeons that fill the sky in the forests of the west." Later the father goes on to say, "They are much sought after for the table, as the flesh is delicate, and many are killed during their sojourn with us." Again on page 293, in the first week in September the son asks, "What birds are those which are hovering in a cloud about yonder field of buckwheat?" to which the father replies, "They are the Common Passenger Pigeon (*Columba migratoria*); they devour a great quantity of that grain in seasons when they are numerous with us. It is, I believe, the only mischief we sustain from them; and the gun takes ample revenge."

From the above quotations it appears evident the birds were quite numerous about 1838, some seasons appearing in greater numbers than in others, the date of their arrival, however, always being somewhat erratic.

So far, unfortunately, I have been unable to obtain any reliable information from the older inhabitants concerning the date of the last pigeons seen here, but probably they disappeared between 1880 and 1885, although it is possible a few stragglers may have lingered even up to 1896, the date of the last one recorded in Maine.

DICHROMATISM IN THE WEDGE-TAILED SHEARWATER.

BY LEVERETT MILLS LOOMIS.

*Plate XIX.*¹

THE Wedge-tailed Shearwater (*Puffinus chlororhynchus*) appears to be restricted to the warmer areas of the Indian and Pacific oceans. It has been definitely reported as breeding on the Seychelle and Mascarene islands in the western Indian Ocean, on islands off the west and east coasts of Australia, on Lord Howe, Norfolk, Kermadec, and Surprise islands in the southwestern Pacific, and in the North Pacific on Volcano and Marcus islands, the Leeward group and Kauai of the Hawaiian Archipelago, and San Benedicto of the Revilla Gigedo Islands. Specimens have been obtained in the Caroline, Marshall, Phoenix, Fanning, and Society islands. Whether any of the colonies are migratory, remains to be determined.

In the extreme dark phase of this Shearwater, the general color aspect of the upper parts is dark brown and that of the lower grayish brown, becoming gray on the foreneck. In the extreme light phase, the general aspect is grayish brown above and white below, except on lower tail-coverts. Intermediates have the white

¹The photograph reproduced in this plate was kindly taken for me by Mr. L. R. Reynolds.