

When all are at the roost there is a confused clatter of calls, alarm notes, and scraps of song, finally they quiet down, often during the night they become frightened and fly about the roost calling to one another. Careful as they are many are killed at night especially during the autumn.

During the autumn the robins roam about the country from one feeding ground to another, taking in turn wild cherries, pokeberries, dogwood berries, and wild grapes. The singing of the birds of the year, begun early in September, now reaches its height, the robins may be seen chasing one another through the woods calling loudly, now and then hundreds burst into song, or frightened groups fly through the woods as a hawk flies over. For a time at noon all is quiet, then they begin as before and as sun set approaches fly to roost.

The roost is occupied until the leaves fall, when the robins all leave at once. Last year this occurred on the 13th of October:

A STUDY OF THE AVI-FAUNA OF THE LAKE ERIE ISLANDS.

BY LYNDY JONES.

THE BIRDS OF PELEE ISLAND, ONTARIO, CANADA.

Tyrannus tyrannus.—Kingbird.

Common on all visits to the Island, and migrating in small companies during the most of August and into September. There were no indications of such extensive nestings on the island as the numbers found there would indicate to be the case.

Myiarchus crinitus.—Crested Flycatcher.

None were found except in 1910, when there was one at the Fishing Point swamp nearly every day after August 5, when the first was seen. There were three there on August 11, two on the 22d, 29th and 31st, and eight on September 5. Conditions seemed to be favorable for several nesting pairs, but none such were found.

Sayornis phœbe.—Phœbe.

Found in 1910 only. The first was found at the Fishing Point swamp on July 19, and one or two there in the vicinity of an old ice house every time the locality was visited. The building was kept locked, so there was no opportunity to explore its interior for the probable nest.

Nuttallornis borealis.—Olive-sided Flycatcher.

One on August 23, 24, 25, 31, and September 5; three on September 1, and two on September 3, 1910. Two were found on August 18 and 19, 1908. The favorite place for this bird seemed to be a certain dead topped tree which stood on the north edge of the deciduous woods which bordered what we termed "The Sumack Park," south of the Fishing Point swamp. The birds were usually first seen on this tree, but left it for some other perch when we approached too near.

Myiochanes virens.—Wood Pewee.

Common everywhere on all visits to the island, and singing. None were seen in the act of migration.

Empidonax flaviventris.—Yellow-bellied Flycatcher.

In 1910 only. The first, two on August 19, and thereafter some were seen every day to the end of our stay. They were most numerous during the first week in September, when a marked migration seemed to be in progress. They kept well down in the trees and bushes, and were silent most of the time. On warm days following chilly nights a few individuals were heard to sing.

Empidonax virens.—Acadian Flycatcher.

Since this is not an accredited Ontario bird, except for the specimens which J. H. Fleming believes he took at Ontario, but lost by the taxidermist, the complete record seems warranted. None were found except in 1910, when the following records were made, all for the woods on the Fishing Point, mostly near the swamp. One on August 15 and 18; two on the 19th, 20th, 21st and 23d; three on the 22d; one on the 29th, 30th and 31st; six on September 1; four on the 2d; two on the 3d and 5th, and one on the 6th. The first noted were singing, and occasional songs were heard afterward. Specimens were taken.

Empidonax trailli alnorum.—Alder Flycatcher.

The A. O. U. Check-List notwithstanding, this is the form which inhabits Ohio and Pelee Island. Specimens from central and north-Ohio have been submitted to Mr. H. C. Oberholser, and all pronounced *alnorum*. It was present at the Fishing Point swamp during the most of our stay on the island in 1910, two or three being

noted on each visit. No migratory movement was noted. Besides the peculiar call note a bird occasionally sang. Nests built after the manner of this bird were found, but it was not possible to positively identify them as such.

Empidonax minimus.—Least Flycatcher.

Present on all visits, and common after August 5, 1910. During the most marked migratory movements this little flycatcher swarmed over the beaches where the vegetation was scanty as well as among the brush and trees. Of course it was singing. Actual migration flights southward were not noted. They probably occurred in the darkness.

Cyanocitta cristata cristata.—Blue Jay.

Present on all visits. It was common on the August 18, 19, 1908, visit, but in 1910 only two were found constantly, and they were in the larger trees in the vicinity of the swamp. They were unusually wary.

Corvus brachyrhynchos brachyrhynchos.—Crow.

There were Crows on all visits and during the 1910 stay, but none were seen in migration. The numbers were not accurately determined, but there were certainly upwards of ten present all the time.

Dolichonyx oryzivorus.—Bobolink.

Present on all visits, usually in migration flights. Some evidently nested in the interior of the island, but the great majority were from the north. The first definite migratory movement took place on July 19. Nearly every day thereafter flocks of Bobolinks were passing southward, usually high in the air. There was little or no hesitation about starting out over the water toward Kelleys, and there were no halts on the way, unless it be at Middle Island.

Molothrus ater ater.—Cowbird.

Present in small numbers on our arrival in 1910. The first migration seemed to occur on August 6, in company with the other species of this family, and such migrations in small flocks occurred nearly every day, the individuals becoming fewer, until the 24th to the 27th, when only one was noted each day, and none afterward. An occasional flock rested in the last trees of the point before essaying the flight to Kelleys. It was not always easy to identify these birds among the other blackbirds, unless they gave their whistle call.

Agelaius phœniceus phœniceus.—Red-winged Blackbird.

Common on all visits, and breeding in the marshes in considerable numbers. Many individuals were singing every day. Begin-

ning on August 10, 1910, flocks were seen migrating nearly every day. The predominant plumage was the post juvenal, until late in August and in September, when many males in nearly full plumage and singing were noted. Some of the larger flocks were noted coming from the direction of Point Pelee, but they may have flown southward along the east shore to near Saw Mill Point and then cut across the land to avoid either a long detour around the South Bay shore or the direct flight across the water to Middle or Kelleys Island. None were actually seen in transit from Point Pelee.

Sturnella magna magna.—Meadowlark.

About normally common on the inland parts of the island where the open field conditions were favorable. None were seen on any but the 1910 visit, because none of the others were extended into the interior. None were seen at the point nor any in migration.

Icterus spurius.—Orchard Oriole.

In 1910 only. Common upon our arrival and continuously so until August 26, then rapidly decreasing to one on September 1, and none after. There were certainly greater numbers than we are accustomed to on the Ohio shore, but the conditions for nesting seemed less favorable. It is altogether likely that many of these birds of Pelee Island came from further north.

Icterus galbula.—Baltimore Oriole.

The occurrences almost exactly parallel the last species, but lasted a few days longer. However, it ceased to be common on August 23, and the last one was noted September 5. The most notable thing about this oriole was the manner of migration, suspected but not so capable of demonstration with the last. The flocks for the first two weeks of August seemed to be wholly composed of young birds, or at least birds in the post juvenal plumage, with no other plumages mixed in. With the advancing days there came a scattering few rather dull colored males, increasing in brilliancy until the last flocks contained many brilliantly colored males. I am making no argument but merely stating the facts as we noted them. This same order of migration was marked on Point Pelee in 1911 also.

Quiscalus quiscula vncus.—Bronzed Grackle.

Present in considerable numbers on all visits. The first big flocks came in on August 10, 1910, and migrating flocks passed southward nearly every day afterward. On August 19, 1910, a flock of more than 3000 settled on the ground and in the trees just north of the Fishing Point swamp.

Carpodacus purpureus purpureus.—Purple Finch.

There were two seen and heard on August 13 and 29, and three on the 24th and 30th, 1910. These birds occasionally sang. They were among the cedars about the middle of the point.

Astragalinus tristis tristis.—Goldfinch.

Common on all visits. It was more numerous about the open fields north of the swamp than elsewhere, but was found in some numbers in the woods of the point and along the beach. An individual would occasionally start out over the water in easy bounding flight and be lost to sight. This bird often visits ships during their passage.

Poœcetes gramineus gramineus.—Vesper Sparrow.

A few noted in the fields inland under ordinary conditions.

Spizella passerina passerina.—Chipping Sparrow.

Found only in the fields of the interior of the island. We were too early to catch any migratory movement of this bird.

Ammodram's sacchararum australis.—Grasshopper Sparrow.

Found about the houses inland—none on the point. While it was a familiar bird in the immediate vicinity of farm houses it could not be considered a common species on the island as a whole.

Spizella pusilla pusilla.—Field Sparrow.

Two were noted at the point on August 18, 1908, and it was present in the fields inland, and occasionally on the point during the entire 1910 study. It was much less numerous than on the Ohio shore, but numerous enough to be considered tolerably common.

Melospiza melodia melodia.—Song Sparrow.

Common on all visits and singing. A nest containing four eggs was found in a bunch of juniper near the limit of trees on the point on August 3. The young hatched within the next five days. This was the most uniformly distributed bird on the island. It could be found anywhere at any time, even well out on the bare sand spit, where it fed on material thrown up by the waves. Individuals were also seen eating the wild grapes and the cedar berries, and other fruits. It was difficult to identify any definite migratory movement of this bird because it was always abundant everywhere.

Pipilo erythrophthalmus erythrophthalmus.—Towhee.

There were only two individuals found, and they in the vicinity of the Fishing Point swamp. They remained in nearly the same locality, where they could be found at any time. One of them sang frequently.

Cardinalis cardinalis cardinalis.—Cardinal.

One of the characteristic birds of the woods of the point on every visit to the island. The range extended throughout the entire wooded belt of the point. During the days of greatest migration individuals made their way into the last bushes, and sometimes even to the drift brush of the sand spit. None were noticed in actual migration away from the island.

Zamelodia ludoviciana.—Rose-breasted Grosbeak.

Two were found on August 30, and one on September 5, 1910. These were in the woods in the vicinity of the swamp.

Passerina cyanea.—Indigo Bunting.

Common on all visits in the deciduous woods, particularly in the vicinity of the swamp. Some few individuals wandered out into the cedar belt. It was singing during the entire stay in 1910.

Piranga erythromelas.—Scarlet Tanager.

A male in bright plumage and a female were found among the oak trees bordering the Fishing Point swamp on the north on July 19, and one or both were found there on nearly every visit afterward. The male was still in full plumage on August 11.

Progne subis subis.—Purple Martin.

Present on all visits, and during the entire stay in 1910. There was no time when Martins were excessively numerous, but during the three distinct migration periods (see antea 105), they were more than common. The great flights were really swallow flights with Martins mixed in. On several occasions the evening flights were watched from an open field north of the swamp, from which point the most of the migrating birds were noted coming from a north-easterly direction across the Saw Mill Point land area. This is the exact direction of Point Pelee. Such flights were just above the tree tops.

Petrochelidon lunifrons lunifrons.—Cliff Swallow.

The fact that this is the most difficult of the swallows to be certain of when it is mixed in with the others may account for its seeming scarcity. It was noted on all visits, and was present in the migrations during the entire 1910 study period, but only an occasional individual was certainly identified among the host of migrating swallows. Many of those seen were some distance away from the shore of the sand spit, very few being near it. Its manner of migration did not seem to differ from that of the other swallows.

Hirundo erythrogastra.—Barn Swallow.

Present in large numbers on all visits, and usually migrating. The flight was usually easy and deliberate, the majority of the

birds flying within a hundred feet of the water, but occasionally individuals mounted high in the air. The only days on which no migratory movements were noted were when a brisk to strong north wind was blowing. The largest movements occurred against a stiff south wind. Companies often gathered on the bare sand of the spit for a short rest before essaying the passage.

Iridoprocne bicolor.—Tree Swallow.

Except on August 6, 1910, when fifty were counted in the migrations, there were very few individuals of this swallow scattered among the migrating host. This seems strange when we found them in great numbers roosting on the lotus stems and leaves in the Cedar Point marshes later. This species can be so readily distinguished from the others that it is not likely that we overlooked many.

Riparia riparia.—Bank Swallow.

Everything considered this was the most numerous of the swallows on all visits to the island. It was in migration every day after July 20, except only when there was a north wind. The line of migration over and parallel to the sand spit was often half a mile wide. There was almost never a continuous stream of migration, but one bunch of the birds following another, so closely that there was at least one bunch within the range each minute during the heavier migrations. The depth of the migrating stream was seldom over 200 feet, and often much less.

Stelgidopteryx serripennis.—Rough-winged Swallow.

A close second to the last in point of abundance, and found on all visits to the island. Every migration of swallows contained many of this species. These flights of the swallows furnished a splendid opportunity for studying the characteristic actions of each of the species. The more deliberate flight of the Rough-wing as compared with the Bank was always noticeable. The flight also tended to be more straight-away, with fewer abrupt upward turnings. The Rough-wing gives one the feeling of great reserves of energy.

Bombycilla cedrorum.—Cedar Waxwing.

Present on every visit, and common in the cedar belt. These birds were strongly inclined to live in flocks. They fed upon the cedar fruit extensively, but were also seen to eat other fruits, particularly the wild grapes. They were decidedly more wary than the Ohio birds. Nests were not found, but it is wholly likely that extensive nestings occurred on the island.

Lanius ludovicianus migrans.—Migrant Shrike.

Seen only during the 1910 studies, when a pair was found in the border of the fields north of the Fishing Point swamp. The nest was not found.

Vireosylva olivacea.—Red-eyed Vireo.

Present on all visits to the island, and in numbers sufficient to be called common. In 1910 it was pretty closely confined to the deciduous trees until the migrations began, when it spread all over the point, and increased in numbers. The singing was incessant during daylight.

Vireosylva gilva gilva.—Warbling Vireo.

A few pairs seemed to have nested on the island in 1910, and these, with others, were found on the point during the migration waves. There was not much singing among these birds. They affiliated with the warblers, feeding among the cedar trees.

Mniotilta varia.—Black and White Warbler.

Found on all visits to the island. In 1910 the first was noted on August 11, and every day thereafter. It became common on the 17th, and remained common during our stay. There were birds in all stages of plumage, but the young plumages predominated. No places seemed to be especially preferred.

Protonotaria citrea.—Prothonotary Warbler.

We found one individual in full plumage on the north border of the Fishing Point swamp, in the early morning of August 22, 1911. This bird was leisurely feeding on some moth, and permitted us to approach within ten feet. It uttered only the chipping note peculiar to this species.

Vermivora pinus.—Blue-winged Warbler.

There were two seen on August 26, and one on September 1, 1910, in the cedar trees near camp. We had expected to find this warbler in some numbers in the deciduous belt near the swamp, but were disappointed. The three seen were clearly not breeding birds.

Vermivora chrysoptera.—Golden-winged Warbler.

One was recorded on August 27 and 28, 1910, in the cedar trees near camp. There was no evidence that they were not migrating individuals.

Vermivora rubricapilla rubricapilla.—Nashville Warbler.

Found in 1910 only. The first was recorded on August 15, and the birds were in considerable numbers after the 16th. This species was one of those showing marked fluctuations in numbers

during the waves of migration. It was distributed everywhere, but was less numerous at the swamp than among the larger trees and in the cedars.

Vermivora peregrina.—Tennessee Warbler.

It was present in some numbers on September 1st, 1905. The first seen in 1910 was on August 15, a single bird; the next on the 17th, two birds, and from the 18th to the end of our stay it was one of the common birds scattered everywhere among the trees and bushes.

Dendroica tigrina.—Cape May Warbler.

This was one of the pleasant surprises of the 1910 study. On the Ohio side it has always been scarce in spring and absent in fall. We noted the first one on August 19, the next on the 22d, the next on the 25th, it suddenly became common on the 26th, and remained so until September 1, when there was a marked decrease and the last was recorded on the 5th. The unweariness of this warbler made it possible to study the various plumages at close range. Specimens of every phase of plumage were collected. The first birds to appear were in the juvenal plumage, and it was only during the last week of our stay that perfect plumaged birds were seen. We had many about our mess tent during meals.

Dendroica aestiva aestiva.—Yellow Warbler.

Common on all visits, and common in 1910 until September 2. The last was seen on the 2d. Individuals were singing up to the last day. While there were more individuals in the vicinity of the swamp than elsewhere, there were many scattered over the whole of the point, after the migrations began. Occasionally individuals would flit down to the last brush on the point, or even occasionally fly well out upon the sand spit, or even essay the crossing to Middle Island, but most of them came back. Numerous nests were found in the vegetation of the swamp.

Dendroica carulescens carulescens.—Black-throated Blue Warbler.

It was present in small numbers on September 1, 1905. The first to appear in 1910 was on August 26, two, and after that date a few were found every day until we left the island. The birds kept well down among the cedars and the brush of the deciduous woods. A few were found in the button-bushes bordering the swamp. All phases of plumage were noted.

Dendroica magnolia.—Magnolia Warbler.

Present on all visits in fair numbers. In 1910 the first seen was on August 19, the next on the 21st, and every day thereafter until we left. It became decidedly common on August 30 and remained

so to the day of our departure. The distribution over the point was uniform, but the birds, as is their wont, remained well down in the trees and bushes. No birds in full spring dress were seen, but there were all other plumages.

Dendroica cerulea.—Cerulean Warbler.

None were found except in 1910. The first were noted on August 11, three, the next on the 13th, one, and after the 15th, when five were seen, several were recorded every day until September 3, after which date none were found. It is doubtful if there were any breeding birds on the island. Conditions such as the birds breed in in northern Ohio were wanting anywhere on the island, as far as we investigated.

Dendroica pensylvanica.—Chestnut-sided Warbler.

It was present on August 18, 1908. In 1910 the first was seen on August 19, two, and every day afterward several individuals were noted. It was common on only one day, September 1. All plumages were represented. Almost no individuals were seen except in the immediate vicinity of the swamp, where the birds were feeding among the button-bushes.

Dendroica castanea.—Bay-breasted Warbler.

It seems a little strange that none were seen except in 1910. The first recorded was August 11, the next, the 15th, two, the 18th, three, and after that a few every day until September 1, when there was a great influx. It remained common until we left. Until it became common one had to look for the individuals in the deciduous trees near the swamp, but the greater numbers spread over the whole of the point. Most of the individuals were at least tinted with bay on the sides. There were none in full spring dress.

Dendroica striata.—Black-poll Warbler.

None except in 1910. The first was on August 11, two, and there were a few individuals every day after until the 26th, when it became common and remained so until we left, on September 7. The first individuals of this and the last species had to be collected in order to make certain of identification. It was usually possible to approach near enough to make out the yellowish edging of the wing feathers of this, or the bay tint of the sides of the Bay-breasted. We found this species more widely distributed than the last while its numbers were few, but when it became common it was everywhere present, like the last. Only fall plumages were seen.

Dendroica fusca.—Blackburnian Warbler.

It was found on August 29, 1905. The first in 1910 was on August 11, one individual in nearly full plumage, and ever day af-

terward it was present in considerable numbers and in all plumages. It became decidedly common on August 23, and remained common until we left. It was as numerous among the cedars as elsewhere, and worked well down to the limit of vegetation on the point. A few individuals were seen to fly toward Middle Island during the day.

Dendroica virens.—Black-throated Green Warbler.

1910 only. The first was August 20, two; the next, the 21st, one; and on each day afterward, becoming common on the 31st, remaining so to the end. We had reason to suppose that it might be found breeding on this island since it breeds occasionally in the river gorges of northern Ohio, but any evidence of breeding was lacking. There were a few birds in nearly full spring dress, but the most were in the juvenal plumage. None sang.

Dendroica vigorsii.—Pine Warbler.

At least one pair was found breeding, in 1910, upon our arrival. The male was singing, and continued to sing until the middle of August. Both parents were seen carrying food into the top of a dense cedar tree. There was a distinct increase on August 24, and the birds were more numerous than at first to the end of our stay.

Dendroica palmarum palmarum.—Palm Warbler.

Found only in 1910. The first August 22, two; the next, the 26th, one; 27th, two; 28th, three; 31st, one; September 1st, one. They remained near the ground at all times, but did not seem to be partial to the vicinity of the swamp. We expected to find more of them.

Dendroica discolor.—Prairie Warbler.

Several were noted on August 18, 1908. The first seen in 1910 was on August 20. The complete records follow. August 20, 1; 27, 5; 28, 2; 30, 2; 31, 1; September 2, 2; 3, 2. It was usually found along the borders of the cedars, or in the smaller cedars which grew in the hollows between the ridges. Some were found at the limit of vegetation on the point. Juvenal plumages prevailed, but one bird was in full spring dress.

Seiurus aurocapillus.—Oven-bird.

One was found on August 18, 1908. In 1910 it was evidently breeding in close proximity to the swamp, in the deciduous woods. From September 1 to the end of our stay it was decidedly common, then ranging well into the cedars, and even roving down upon the brush of the point.

Seiurus noveboracensis noveboracensis.—Water-Thrush.

On September 1, 1905, it came in with other migrating birds in some numbers. In 1910 it was first seen on August 7, one individual was taken, another one on the 10th, another on the 21st, and on and after September 1st it was common, ranging everywhere among the cedars, and down upon the point in the dead brush. "Squeaking" always resulted in bringing these birds within a few feet of one. The opportunities afforded for comparing this with the next species were improved to the extent of learning certain individual traits of difference. The alarm note is easily distinguished when once learned.

Seiurus motacilla.—Louisiana Water-Thrush.

Evidently breeding in 1910, in the vicinity of the swamp. It was seen on September 1, 1905, and on August 18, 1908. It became common on August 28, 1910, and continued so until we left. It remained more numerous in the vicinity of the swamp at all times, but individuals occasionally strayed down to the point along the east beach. This and the last species could sometimes be studied together from my tent door. The slightest movement on my part would send them scurrying away.

Oporornis agilis.—Connecticut Warbler.

Found only in the vegetation along the border of the swamp. The records follow. August 21, 27, 29, September 1 and 2, 1910, one bird on each of the dates given. The birds kept well to cover, and would not flush.

Oporornis philadelphia.—Mourning Warbler.

In contrast to the last species, this bird was found among the cedar trees, either on the ground or among the lower branches. In the middle of the day individuals would sometimes visit the camp and feed unconcernedly as long as we remained quiet. The records follow. One on each of the following dates—August 15, 27, 28, 29, September 2, and two on September 1 and 3, all in 1910.

Geothlypis trichas trichas.—Maryland Yellow-throat.

One of the commonest and most characteristic birds of the region of the swamp. It also ranged down the point to the limit of vegetation, on the days of strong migration. It was found on all visits to the island, and some individuals were singing each day. In 1910 it was common up to August 23, after which only a few were seen each day. Nests were not found, but there is little question that the birds nested on the island.

Icteria virens virens.—Yellow-breasted Chat.

There was every reason to expect this bird to breed regularly on the island, but the only records are August 18, 1908, and Au-

gust 15, September 5-6, 1910. On the last date a bright plumaged bird came to the opening in my tent and remained in an enquiring attitude until I made a movement in the direction of the camera, when he skurried away with a loud chatter.

Wilsonia pusilla pusilla.—Wilson's Warbler.

The first seen was on August 12, four the next day, and a few each day until the 30th, when it became common and remained so to the end. None seen except in 1910. While the numbers remained few the most of the records were made at the swamp, but when the birds became common they spilled over among the cedars, and ranged to the limit of vegetation on the point. They were not at all wary, and permitted close approach.

Wilsonia canadensis.—Canadian Warbler.

It was present on September 1, 1905, and in 1910 the first was noted on August 11, the next on the 13th, and beginning with the 15th there were several recorded each day during our stay. It seemed to be pretty closely confined to the underbrush in the vicinity of the swamp, but occasionally it wandered down the point among the cedars. On September 1, 1910, it was recorded as tolerably common. On that day it was found at the limit of vegetation on the point.

Setophaga ruticilla.—Redstart.

Present and in sufficient numbers to warrant being called decidedly common on all visits to the island. It was evidently breeding in considerable numbers in all of the woodlands visited. In 1910 it was singing during the entire time of our stay.

Dumetella carolinensis.—Catbird.

Found on all visits to the island in small numbers. Pretty closely confined to the region of the swamp, but occasionally found among the cedars and in the shrubery along the west beach. The scarcity of this usually common species was the most notable thing about it.

Torostoma rufum.—Brown Thrasher.

Present and common on all visits. About the first bird seen when one lands near the limit of vegetation on the point. It was the most numerous in the bushes along the west beach where the wild grapes were abundant, and many individuals were seen eating the grapes. There seemed to be a noticeable increase in numbers when the first migratory movement occurred, about August 12, but no birds were seen to cross to Middle Island, and none even made the start in daylight.

Thryothorus ludovicianus ludovicianus.—Carolina Wren.

Present on all visits, but clearly less numerous in 1910 than at any other visit. The colony noted in 1905 had disappeared with the tangle by the cutting of a road through to the east beach, and the birds had moved to the border of the swamp, and seemed to be scattered somewhat. The evidence seemed to point to a somewhat precarious foothold on the island, possibly due to the fact that this is about the northernmost limit of the species.

Troglodytes aëdon aëdon.—House Wren.

We found a pair near a house north of the swamp, and another pair at the store on the west side of the island. None had appeared in migration at the time of our departure, September 7, 1910. One is at a loss to account for the scarcity of this adaptable wren on the island where nesting places are plentiful and where its natural enemies seem to be few.

Telmatodytes palustris palustris.—Long-billed Marsh Wren.

Apparently there had been only one nesting at the swamp. We found seven or eight individuals there on every visit. One of the birds continued to sing every day during our stay. None were found at the north end of the island, where conditions for nesting were rather more ideal than at the Fishing Point swamp.

Sitta carolinensis carolinensis.—White-breasted Nuthatch.

The only record for the island, strange to say, is the single individual found in the trees at the north border of the Fishing Point swamp on September 1, 1905. If any had been present in 1910 they would certainly have been found by some of the party.

Sitta canadensis.—Red-breasted Nuthatch.

It was present in considerable numbers on September 1, 1905. In 1910 the first one was seen on August 19, and every day thereafter until the 26th a few were recorded. On the 26th it became common and continued so to the end of our stay. It clearly preferred the cedars, where it fed much after the manner of the Black and White Warbler, with which it was associated rather more than with other warblers. On the great migration of September 1 it seemed to swarm all through the cedars, and even into the brush on the point.

Polioptila cærulea cærulea.—Blue-gray Gnatcatcher.

Found only in 1910. Then it was found only in the cedars. The records follow. August 21, 6; 22, 3; 23, 1; 27, 4; 28, 5; 30, 1.

Hylocichla mustelina.—Wood Thrush.

August 31 and September 1, 1910, one each day. These were clearly migrating birds. We made thorough search everywhere for

this thrush without success. Everything, as far as one could judge, was favorable for the nesting of this species on the island.

Hylocichla fuscescens fuscescens.—Veery.

One was recorded on August 18, 1908, and the following records for 1910: August 26, 2; 27, 1; 28, 3; 30, 1; 31, 1; September 1, 6. These were clearly migrating birds. Careful search was made for the thrushes at the beginning of the 1910 work, in the expectation of finding this species nesting in some numbers, but none were found.

Hylocichla aliciae aliciae.—Gray-cheeked Thrush.

The only certain record was one taken on September 3, 1910. It seems likely that there must have been a distinct migration, either unnoted by us or else after our departure. The light was often so poor, in the thick growth of the cedars, that it was not possible to make certain of the identification of the swarming thrushes.

Hylocichla ustulata swainsoni.—Olive-backed Thrush.

As recorded elsewhere (antea, p. 16) the Olive-backs became suddenly common on the morning of August 31, 1905, and continued so while we remained on the island. Other visits were too early. In 1910 the first was found on August 29, the next six birds on September 1, and several each day while we remained, but there was no big rush such as occurred in 1905.

Planesticus migratorius migratorius.—Robin.

Present on all visits in considerable numbers. There were more seen inland than on the point, and no migratory movement was noted. Of course the birds nested on the island.

Sialia sialis sialis.—Bluebird.

There were a few records for the point, none of migrating birds. The birds were not uncommon in the interior of the island, where they had evidently nested.

One of the surprising things which this summer and early autumn study on Pelee Island brought out, and which it needed the following summer's work on Point Pelee to corroborate, was the evident southward movement of young birds in advance of the old ones. This was first noticed in the Cowbird and Red-winged Blackbird, and later in both orioles and practically all of the warblers. With the swallows and martins it was not so clearly marked because the old and young plumages are not so readily distinguished. I

am not prepared to say that the companies of young were unaccompanied by old birds, because in the nature of the case it was not possible to carefully scan every bird in flocks of twenty or more. However, in the case of the Cowbirds the early flocks were small and no old birds of either sex were seen with the young, and it is not at all likely that there were in fact, for it is well known that the young of this species do not gather with the adults until relatively late in the summer.

Of course this reversal of what we have come to accept as the normal order of southward migration may be purely local, due to the peculiar topographical conditions of the region, but it seems to me that even this supposition is hardly capable of logical demonstration. The very last Baltimore Orioles to migrate were brilliant males, and the first noted on the island were clearly young birds. If the same thing had not happened on Point Pelee the next summer, when weather conditions were markedly different, and the migrations much less crowded, one might well believe that the conditions in 1910 were local. One has suggested that as the conditions are clearly local on Heligoland, which occupies an unique position, so the unique position of Point Pelee and Pelee Island may also be clearly local. This still further emphasizes the need for coöperative work over a wide area simultaneously. There ought to be competent observers stationed at short intervals from Toronto to Milwaukee, inland as well as along the shore of lake Erie, and several lines from western New York westward as far as Chicago or farther, for both southward and northward migrations. Unless observations are made every day the results are only approximate. They ought to be continuous, but who of us can spend all of his time in outdoor bird study?