maculatus or one of its forms, Orphia frigida and Stiropleura decussata, these being the only ones fully developed at this time.

I left for home on May 3rd, at the time when much life was only just awakening from its long winter sleep, so could only contemplate what I might have seen had I stayed.

SOME RAPTORIAL MIGRATIONS IN SOUTHERN ONTARIO.

By P. A. TAVERNER, GEOLOGICAL SURVEY, OTTAWA.

In many ways, Point Pelee is one of the most interesting bird observatories in Ontario, if not in Canada. Stretching, as is does, from the lower extremity of Essex County south into Lake Erie, it forms the extreme southern point of the Canadian main-land and, reaching away out towards the outlying islands, helps to form a natural passage-way across the lake for the north and south migrations. That birds take advantage of these natural stepping stones on the way, is evident to any one who spends a migration season, especially a fall one, on the Point. The most marked demonstration of this migrational movement is shown by the great flocking of individuals that occur there annually. There are certain species that we expect to occur at times in great numbers and flocks of blackbirds that darken the sky or pass like shadows across the sun are regular and expected occurrences in the fall months; but at Point Pelee we find gatherings of other species whose non-gregarious habits are in striking variance with the phenomena we observe here. Species that seem usually to drift through singly or in small gatherings of unnoticeable size at times occur in numbers that are easily designated "flocks." Such occurrences have been observed in many species of raptores and unusual flights have been noted at the Point of Sharp-shin, Cooper, Red-tailed, Red-shouldered and Rough-legged Hawks and Acadian Owls.

That these aggregations of individuals during migrations are pure manifestations of gregariousness is an idea open to much doubt. In most cases indications point to the fact that they are but gatherings brought together by a community of interest and are the result of congestion of a wide migration front into the

narrow bounds of the Point.

How much land of the summer ranges is drained by this Pelee migration route it is difficult at this writing to state, but from the few illuminating glimpses we have had on the subject it must be an extensive territory. Much more work, however, is necessary in the country to the north before anything definite

in this direction can be arrived at. Some of the notes on a few of these flights may be of interest to the readers of The Ottawa Naturalist.

SHARP-SHINNED HAWK. (Accipiter velox).

Flights of hawks are not rare in literature, but the great majority of them are irregular in occurrence and rarely seem to occur twice in the same place or in successive years. At Point Pelee, however, a flight of this species can be looked for regularly. beginning about Sept. 10th and lasting irregularly for about a week. About the middle of October another flight usually occurs, lasting several days and then gradually diminishing until cold weather sets in. The writer first saw this flight on September 9th, 1905. Sharp-shins were but normally common and we saw but one or two each day. The next morning, however, we found them everywhere on the Point: beating about the edges of the shrubberies, darting through the coverts like shadows and winging their way up and down the Point just over the tree tops, while high in the air their forms could be seen at all altitudes until they looked like mere specks in the sky. Standing in a small opening in the woods and looking out over an open field we could count from twenty-five to thirty individuals at any time of the day. During the flight there is usually a steady stream of hawks crossing from the end of the Point out towards the Ohio shore opposite, and during the height of the migration a man can stand near the end of the Point and shoot Sharp-shins almost as fast as he can load and fire. On September 18, 1906, Mr. W. E. Saunders, in company with Mr. B. H. Swales and the writer, counted, between 11.24 and 11.54 a.m., 133 Sharp-shins that left the main land for across the lake. Besides these, 74 more went out to the end of the Point and returned again, without crossing. An interesting point to observe is that this early September flight is composed almost entirely of juvenile birds in the brown plumage and it was not until October 16, 1908, that we saw any adults at all. This flight was not quite as heavy as that of the early young birds but we noted over a hundred birds daily, nearly all being adult males. At our station at the end of the Point the birds pass so close that there is no difficulty in distinguishing either plumage or sex; many of them pass within almost arm's reach.

The effect of this great increase of raptorial life on the small birds is most interesting. Up to their advent the woods are usually swarming with the small species of warblers, flycatchers, etc., but as soon as the Sharp-shins put in an appearance these disappear to almost nothing and the woods are almost lifeless. Most of the small birds seem to leave immediately and what

remain keep so close to the dense underbrush as to be most difficult to find. In spite of all their care, however, great numbers fall victims to the hunting of the hawks, and little scattered piles of fresh feathers dot the ground under the shelter of the red cedars, from one end of the Point to the other. The Olivebacked and Grey-cheeked thrushes are the greatest sufferers, in fact it almost looks as if the hawks followed these species down from the north, but the warblers, flycatchers, vireos and sparrows also have much to endure. The Blue Jays seem much harrassed but are so well able to take care of themselves that but few are caught. They assume an air of watchful bravado and though they often frequent the most exposed positions and are loud in their discordant calling, they seldom venture far from the protecting grape-vines and at an instant's notice are ready to dive down into their protecting depths. Brown Thrashers keep close in the thickest juniper growths and slink across from cover to cover in the most inconspicuous manner possible. Flickers, though often attacked, seem always ready to dodge behind a branch when they see danger coming and we have seen little or no evidence of their suffering to any extent from the assaults of the little accipiters.

COOPER HAWK. (Accipiter cooperi).

Though the Cooper Hawk flight is nothing in extent like that of its smaller relative, it is still well worthy of mention. It comes later than the first flight of the latter and many of them remain with the Sharp-shins until well into the late fall and early winter. Our first experience with them was September 26, 1908, when 150 birds were observed a day. Since then we have almost always found them abundant any time about the latter part of September and early October. If the Sharp-shins are hard on small bird life the Cooper Hawks are much worse. The flickers and Blue Jays that escape practically scot free from the smaller hawks suffer extremely from these larger enemies, and among the feathery remains that we find scattered over the ground many are those of Meadow Larks that do not put in an appearance until well along in September. Neither of these two hawks seem to do much hunting or moving about in the early morning and are usually not in strong evidence until the sun is well up. As in the Sharp-shins, the first birds to arrive in the fall are the juveniles, while the later ones are nearly all adults.

RED-SHOULDERED HAWK. (Buteo lineatus).

This species that we listed in our "Birds of Point Pelee" (1907)* as, "the rarest Buteo on the Point," we have since

^{*} Wilson Bulletin, 1907.

found to be also subject to periodic flights. We saw one such on October 30, 1908, when, during our three days' stay, we noted about fifty birds each day.

RED-TAILED HAWK. (Buteo borealis).

The only flight of this species noted at the Point was on October 30th—November 1st, 1908, when "numbers were in sight at any one time." Without doubt flights of both of these latter species occur with fair degree of regularity.

ROUGH-LEGGED HAWK. (Archibuteo lagopus sancti-johannis).

The Rough-leg is usually regarded as one of the rare hawks in Southern Ontario and the seeing of a couple of individuals a season is a matter of some congratulation. On November 2, 1908, Mr. W. E. Saunders described seeing what may well, in this species, be regarded as a flight. During the day he saw about thirty-four individuals, most of them in the evening, when twenty-six were in sight at one time. They were all high up and sailing in great lazy circles but gradually working to the south. Again, on October 16, 1910, we observed about a dozen under the same circumstances as the above, mingled with a lesser number of Red-tails and Red-shoulders. They remained very high up and at times they even vanished from sight in the field of our glasses.

ACADIAN OWL. (Cryptoglaux acadica).

The flight* of these diminutive little owls that we witnessed on October 15, 1910, was one of the most interesting occurrences of this kind that we have seen at the Point. In previous autumns we had found feathery remains of individuals that had been devoured by other larger birds of prey, but until this date we had never seen live individuals on the Point. This day, however, a few feathers scattered on the ground, caught our eyes and caused us to institute a careful search of the red cedar thickets; we were soon rewarded by the discovery of a bird sitting close up to a tree trunk and deep in the shadow of the concealing evergreen fronds. Shortly after, another was found and then more. In all, twelve birds were seen in time aggregating less than three hours. They were so inconspicuous and difficult to find that these could have made but a very small part of the birds that were present. We worked but a small part of the likely territory and without doubt the number of Acadian Owls present on the Point must have been very great. Most seen were within from six to ten feet of the ground and close up against the cedar trunks. They never flushed unless the branch they were on happened to be shaken, and sat so close and still that we were able to photograph one at

^{*} See Auk, July, 1911, pp. 329-334.

close range and finally almost touched it with the hand without its flying. The following morning the owls were all gone. We worked the thickets well for them but without finding a single bird. With them disappeared a number of Long and Shorteared Owls that were haunting the same localities the day previous and which we strongly suspected were to blame for the death of the two or three little owls whose remains we ran across in the course of our rambles.

POPULAR ENTOMOLOGY.

THE LUNA MOTH.

By Arthur Gibson.

Among the many kinds of beautiful insects which occur in North America, there are none which attract more general attention, when seen for the first time, than the large moths known popularly as Emperor Moths. Of these there are eight different species which occur in Canada: all belong to the family Saturniidæ. The caterpillars of these moths, known as the giant silkworms, are among the largest of the leaf-eating insects which we have. The larvæ are, of course, extremely voracious and, during this stage in the life of these insects, devour many times their actual weight of food. None, however, are of much economic importance, but where several occur on a small tree their work soon denotes their presence, and, if it is desirable to destroy them, hand-picking is the simplest remedy. Although the caterpillars of these Emperor Moths are so voracious, the moths themselves are unable to feed on account of their mouth parts being aborted.

The Luna Moth, Tropæa luna, which is figured on the next page, has most appropriately been styled "fair empress of the night" and "queen of the night." It was first described by Linnæus, in Systema Naturæ, in the year 1758, so has long been known to naturalists. It is indeed one of the most beautiful of all insects. The four wings are of a delicate green colour, the two front ones being bordered along the upper edge with purple, or purplish-brown, which colour also extends across the thorax near the head. The head, rest of the thorax, and abdomen is white, or pale greenish-white. The eye-like spot towards the middle of each wing is transparent in the centre and bordered with lines of white, pale purple, yellow and black on one side, and dark purple (or red), yellow, blue and black on the other side. The eye-like spot on each of the front wings is joined by a



Taverner, P. A. 1911. "Some Raptorial Migrations in Southern Ontario." *The Ottawa naturalist* 25(5), 77–81.

View This Item Online: https://www.biodiversitylibrary.org/item/17544

Permalink: https://www.biodiversitylibrary.org/partpdf/369512

Holding Institution

MBLWHOI Library

Sponsored by

MBLWHOI Library

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.