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THE OTTAWA NATURALIST

VOL. XXII.

OTTAWA, MARCH, 1909

No. 12.

NOTES ON A THREAD-LEGGED BUG.

By H. F. WICKHAM, IOWA CITY, IOWA.

In about twenty years collecting at Iowa City, I had never met with a fully grown specimen of the wonderfully emaciated insect that goes by the name of *Emesa longipes*. De Geer. Therefore was much rejoicing when my wife picked up one from a somewhat dusty corner of the bedroom floor, at a time when the house was undergoing repairs and subject to the passage of many feet. For twelve months this remained a solitary treasure, but in November of 1907 another was taken on a window, and during the winter a third specimen was found dead on a fly screen at the opposite end of the cellar. Suspicion became strong that we were entertaining a colony unawares, and future developments have fully justified this impression.

Last September, on the second day of the month, a neighbor living next door came to see me, bearing one of these curious beasts, which he had found crawling on his clothes. While we were seated on my porch discussing previous finds. I holding this latest acquisition in my hand, he called my attention to another crawling along my arm. "I wonder if they fly," he said. but I replied that it seemed unlikely since the insect was so ungainly and the wings so very small in proportion, the thoracic segments showing none of the structure common to many small-winged insects of good flight. Scarcely had I made out my case, when another of the bugs came along, in full flight. only two or three feet in front of our faces and alighted on one of the pillars where it was easily caught. This gave me plenty of specimens for cabinet purposes and for class demonstration, so when still another female came to hand I put her in a box where she would have plenty of room to run, if she so desired. and waited to see what would happen. Running, however, was not her forte, she preferred to stand, rocking up and down on her long threadlike middle and hind legs, holding the shorter raptorial front pair, with the tibiæ folded back, out in front of her, and any urging only forced her into a slow walk. She ate nothing, perhaps of necessity, for I do not recollect that I gave her any room-mates, but before long she began to lay eggs at random in her prison, fastening them by one side to the walls of the box. In all she laid about a dozen, then died. The eggs bore a close resemblance to small caraway seeds, being curved in about the same way, the convex side, by which each was attached, smooth under ordinary powers of the hand lens, the rest of the surface ornamented with about ten or twelve longitudinal rows of scale-like projections. One end of the egg was rounded off, the other bore a structure like the lid of a jar with a tapering peg in the middle. After a few days the eggs were carefully detached from their moorings and put in a pill box on my library table where they were duly forgotten for a space of several weeks.

One evening in the middle of November, while looking for some specimens that had been mislaid, I opened the box and was pleased to see the first little bug out of the egg, a miniature of his mother, even to the rocking motion with which he responded to my letting the light into his dark abode. Next day, two more came on the scene, and the day following brought out In all cases the infants had escaped from the egg by pushing off the handled lid, which however often remained attached to the shell as by a hinge. The fifth bug died when half way out, and no more got even that far, so I still have several eggs to serve the original purpose of mounts for microscopic slides. The young animals were almost perfectly colorless and all died within three or four days, though I had hoped that the stronger would manage to keep alive at the expense of the more newly born until a few mosquitoes or gnats could be obtained from the cellarway which furnishes that sort of entomological material all winter.

Some of the little bugs have been mounted in balsam on slides and when projected on a screen by means of the microscope attachment of our stcreopticon, show the characteristic elongation of antennae, body and legs very nicely. The front legs have the same spiny teeth as in fully grown individuals showing that the insect pursues a predaceous life from birth. Their history ought to be fairly easily followed by any one who has the fortune to find females in the fall of the year. A part of the eggs might be kept in a warm room as mine were, if provision were made in advance for supplying the young with food when they appeared, but it would probably be better to keep a good proportion of them in a cool cellar until spring, this would doubtless retard hatching until that season, most likely the natural period of appearance.

Most of our texts and reference books contain only short notices of Emesa longipes, but Mr. P. R. Uhler, in the Standard Natural History, has given a more complete account. He says, "When lodged on the twig of a tree or bush it has the curious habit of swinging backwards and forwards like some of the long-legged spiders, such as Phalangium. The species is quite common in many parts of the United States east of the Rocky Mountains, from Massachusetts to Florida, and west to Central Texas. In Maryland its principal home is in the young pine trees where it may be seen with its two fore legs placed close together and stretched out in front. Occasionally it leaves the trees and takes shelter in sheds, outhouses and barns where it may be seen overhead swinging by its long legs from a rafter or the lining of the roof. The immature form may be found roaming over the trees during early summer, but by the middle of August it acquires the organs of flight and becomes a fully developed adult. We do not vet know where it deposits the eggs; but from analogy we are led to believe that these are glued to the twigs of bushes and trees." Mr. Summers, in a paper on the Hemiptera of Tennessee, writes that it may be seen in old stables and outhouses, hanging from the rafters or crawling slowly about in search of flies and other insects which it seizes with its front legs. Dr. Howard, in the Insect Book, says that one species frequents spiders' webs and robs the spiders of their prev.

THE LATE DR. JAMES FLETCHER.

A Voice from the Pacific.

The Memorial Number of the OTTAWA NATURALIST, whilst containing many touching tributes to the memory of our dearly beloved friend, is conspicuous by the absence of any from this side of the Dominion. I. therefore, ask the privilege of contributing a few words to the memory of one of whom it may be truly said "Amicus humani generis."

My acquaintance with Dr. Fletcher, whilst of not as long standing as some others, dates back to the time of his first visit to the West in the very early eighties, when we at once became true and fast friends which subsequent meetings only served to accentuate; for, as it has been said of him, "to know him was to love him." Our work both in our public and private capacities has been carried on, certainly to my own advantage, and with mutual pleasure, and I can unreservedly say that what little I know of Natural History is due to the teachings of our

lamented friend. Our work in connection with our respective public positions took us all over the settled portions of British Columbia, excepting the extreme north, and during these journeys not only under his guidance were we able to collate information of invaluable character, but were enabled to accomplish many excursions in search of specimens relating to our work. Amongst the many points visited I may particularly mention Mount Arrowsmith, Mount Benson, Mount Che-am and the Rockies and Selkirks—points of which Dr. Fletcher to the last spoke with enthusiasm, and even as late as October last, suggested a further visit to his beloved Che-am. It was here that he captured his first specimen of *Erebia vidleri*, to his infinite delight, as he had long sought in vain for its habitat.

The astonishing activity of Dr. Fletcher, his untiring energy, his keen appreciation of the beauties of Nature, his quickness to observe anything new or interesting, his unfailing good humour, even under the most adverse circumstances, his close observance of the idiosyncracies and habits of men and animals, his love of the young and desire to impart knowledge and create a liking for nature study, and his thoughtfulness for the comfort and pleasure of others, all contributed to making him the general favorite he was and rendering every moment enjoyable which was spent in the company of this truly great man. Illustrative of his indefatigable activity I may mention the following incident: After a hard day's tramp, camped under a clump of hemlocks on a beautiful grassy slope of Che-am, and after our evening meal and pipe, about the time that one's thoughts are of bed, he proposed a walk in the moonlight to the top of the ridge. Tired as I was, I felt loth to leave the camp fire, but I consented, albeit somewhat reluctantly. The result amply repaid us; the whole of the surrounding snow-clad peaks including Mount Baker lav clothed in the soft moonlight seemingly towering above us, the whole a scene of surpassing beauty. We retired to our rest impressed with the grandeur of nature and the littleness of human efforts in comparison.

In all his visits to our home in Victoria he ever displayed the greatest pleasure in everything appertaining to our home life, and was ever ready to contribute to our happiness by those acts of kindness for which he was so justly celebrated. Only on his last visit, rather than I should be detained by duty, he undertook to read proofs for the press, which he did late into the night, whilst the rest of the company present enjoyed themselves in another room, in order that I should be able to accompany him. This, our last trip together, was taken the next day to the Dominion Biological Station at Departure Bay, of

which the Rev. George W. Taylor, another life long friend of Dr. Fletcher's, is curator, where we spent a couple of days. On parting from him, he with his usual thoughtfulness, insisted on carrying my case to the waiting conveyance, as he considered I was still an invalid. Little did we think it was to be our final

parting.

I can bear witness to the inestimable value of the assistance he afforded this province in all those questions affecting the welfare of the agriculturist and the people generally; that to the other parts of the Dominion and to mankind in general are but too well known and have been dilated upon by abler pens. And now arises the question, how can his place be filled? In our hearts at least there is a void which we feel that time can but partially cure, and in bidding farewell to one who has so endeared himself to all and whose life was so successfully and disinterestedly devoted to the welfare of his country, we may well say.

"He so sepulchred in such pomp dost lie That kings for such a tomb would wish to die."

J. R. ANDERSON.

Victoria, B.C., 26th January, 1909.

EPIGÆA REPENS IN WATERLOO COUNTY.

As all references to the habitat of Epigæa repens, L., I have seen, have been "sandy or rocky woods especially under evergreens," a description of the conditions under which it grows wherever I have found it in Waterloo County may be of interest. I have collected it at three stations and always in cold cedar swamps with Ledum groenlandicum, Oeder. At one large swamp where it is abundant it is difficult to reach while in bloom, owing to the inundated condition of the swamp in spring, but although very wet in its surroundings it is mostly found on hummocks, old rotten logs, and more elevated places such as is mostly found around the roots of cedars. Nothing can better describe the conditions under which it grows than the following list of trees and plants that are immediately associated with it: Ledum groenlandicum, Oeder; Dalibarda repens, L.; Chiogenes hispidula (L.) T. and G.; Cypripedium reginae, Walt.; Tiarella cordifolia, L.; Caltha palustris, L.; Picea mariana (Mill) B.S.P.; Thuja occidentalis, L.; Taxus minor (L.) Britton, and Larix laricina (DuRoi) Koch.

W. HERRIOT, Galt, Ont.

CARIBOU ON THE QUEEN CHARLOTTE ISLANDS.

News comes from Massett, Queen Charlotte Islands, that some Indians have just arrived there from the interior of Graham Island, bringing with them the heads and hides of three caribou. They stated that they had also seen a calf, which, however, escaped. A letter just received from the Rev. W. E. Collison confirms this report, and encloses a photograph he had himself taken of the animals.

The British Columbian Government had already despatched the curator of the Victoria Museum to look for deer on the Queen Charlotte Island, but the specimens just referred to reached Massett before his arrival there. He will, however, doubtless secure them, and before long we shall have a specialist's report on them. They presumably belong to the species described by Mr. Ernest Thompson Seton, in the Ottawa Naturalist for February, 1900, as Rangijer dawsoni.

At last, then, the long debated question as to the existence of caribou on the Queen Charlotte Islands has been settled in the affirmative. The present writer, whose intimate acquaintance with the Islands extends nearly over twenty years-eight of which he resided at Massett-has been amongst those who disbelieved in the existence of caribou there. It seemed so improbable that such large and active animals could have existed so long in so comparatively small an area, and yet remain unseen; for, if we except the fragment on which Mr. Thompson Seton founded his species, which seemed to have a doubtful history, it is a well-known fact that no caribou have been killed during the period just named, nor are there any animals on the Islands likely to prev on caribou. Even if only moderately prolific, they must in this period have increased to such an extent that they could hardly escape notice. However, they are there, and they must be another example of the truth of Darwin's statement in his Origin of Species: "Where any species becomes very rare, close interbreeding will help to exterminate it. Authors have thought that this comes into play in accounting for the deterioration of the aurochs in Lithuania, of red deer in Scotland, and of bears in Norway."

It is comforting to see that the provincial government have passed an Order in Council prohibiting the hunting, killing, or taking of caribou on the Queen Charlotte Islands. One only hopes that the order will reach Massett in time to prevent the Haidas making an indiscriminate slaughter of what remains of these interesting animals.

J. H. KEEN.

THE BURROWING OWL (CUNICULARI. HYPOGÆA).

This interesting bird is at the time of writing very rare in this district, although some ten or twelve years ago it was to be found in certain spots, living in pairs as a rule, although I knew of one colony of some dozen individuals living together in an assemblage of burrows on the edge of a tract of barren prairie land, the soil of which was so strongly impregnated with alkali that the only vegetation was a few scattered tussocks of coarse grass and stunted shrubs, among which the owls had taken up their quarters. The birds might be seen walking about among the mounds at the entrance of their underground dwellings, taking short flights over the prairies, and on the approach of danger retreating into the safety of the burrows.

These owls are abroad at night as well as during the day, and at that time utter a peculiar cry, of two notes repeated at intervals. The sound may be heard for a considerable distance in the darkness, but if one attempts to catch sight of the performer by creeping up to the spot from which the sound comes, it ceases suddenly, the bird no doubt seeking safety underground.

I dug up the residence of a pair of these birds and found a tunnel running in a sloping direction to the depth of some three feet at the end of which was a chamber roughly oval in form, with no lining of grass or other material, and on the floor of this lay the bodies of four mice, the head of each one had been devoured, the bodies we must suppose were being kept against days of scarcity. This seems to me a peculiar habit, for a carnivorous bird, especially as there were no young to provide for.

This interesting colony has been long extinct, and the solitary pair which had their home near the spot for a few years, have long since deserted it, owing to the ploughing up of their building—or perhaps I should say, digging site.

Sometimes in the evening the call note may still be heard.

but it comes from a long distance, and is a rare sound.

E. P. VENABLES, Vernon, B.C.

MEETINGS OF THE COUNCIL.

January 26th—The following members in attendance: the President, Mr. A. E. Attwood, Miss Q. Jackson, Miss E. E. Curry, Rev. G. Eifrig, Messrs. A. Halkett, A. McNeill, H. H. Pitts, L. H. Newman, and T. E. Clarke.

The following were elected to membership:-

Mr. Thos. McMillan, Seaforth, Ont.

Mr. J. A. Munro, Toronto.

Hon. Mrs. O. H. Lambart, Ottawa.

Mr. G. Michaud, Ottawa.

On request of the Natural History Museum of Hamburg it was decided to exchange publications with the Museum.

The Publishing Committee were requested to report at the next meeting of Council on the state of that portion of the Library now stored in the basement of the Normal School and to make some recommendation as to what should be done with it.

February 3th—Present: the President, Mr. A. E. Attwood, Messrs. A. Halkett, A. Gibson, C. H. Young, E. E. Lemieux, A. McNeill, L. H. Newman and T. E. Clarke.

Miss W. K. Bentley, Ottawa, was elected a member of the

Club.

The Publishing Committee presented a report showing progress on the work of dealing with the Library question.

T. E. C.

BIRDS OBSERVED AT OTTAWA. ONTARIO. WINTER

By G. EIFRIG.

The present winter has been a very successful one for Ottawa, from an ornithological point of view at least. While it has not been an unqualified success from the standpoint of the winter itself, inasmuch as the essentials of winter hereabouts, cold and snow, are remarkable for their low quantity, and therefore coal-dealers presumably will pronounce it a dismal failure, yet the birds and especially the true Canadian winter birds have taken to our fine capital city in greater number and variety than in many years since and probably for many years to come.

To begin with the rarest, on December 13th a flock of about thirty Bohemian Waxwings or Chatterers (Ampelis garrulus) took up their residence in the Metcalfe-O'Connor Streets' district where they feasted on the berries of the many mountain-ash trees to be found in that part of the city. They usually divided into small flocks and spread out over this area, and then they joined forces again for the night. From about January 12th, however, they concentrated themselves at the corner of Slater and O'Connor Streets, where a small rowan tree offered berries to them that seemed to be more to their taste than any others. Here and on neighboring larger trees they

could be seen every day, sometimes only a part of the flock and then again all, until the 24th of January, when the queer rain and subsequent freezing coated everything thickly with ice. They were, however, seen as late as February 22nd. This and the species next mentioned are about the two most irregular and erratic birds we have. Their coming and going follows no recognizable rule or law; they are in no wise migrants, but only aimless wanderers. They may come here next winter again, in greater numbers than in this, or they may not again turn up for many years. Their breeding range and habits are but imperfectly known. In winter they may turn up anywhere, but in summer they have only been seen in the stunted spruce stands around Hudson Bay; in the Mackenzie Basin at Great Bear Lake; at the sources of the Athabasca River and high up in the Rocky Mountains in British Columbia, and at Banff and Canmore. They make their nests of moss, etc., well up in pines and firs. It is a beautiful bird, much like the Cedarbird, only larger and handsomer.

On February 7th a flock of the rare and pretty Evening Grosbeaks (Hesperiphona vespertina) put in an appearance in the Somerset-Cartier Streets' neighborhood. While they are not at all averse to rowan berries, they prefer the seeds of the Manitoba or ash-leaved maple (Acer Negundo). There were thirteen of them, and the males in their handsome vellow, white, black and dark olive-brown plumage certainly presented a fine sight. They would often alight on the roofs of houses or sheds and eat snow and perhaps clean themselves in it. The females and young are much less conspicuous, being a uniform gray over the head and body, the wings being black and white, and a tinge of olive on the neck and breast. A flock of seven was seen on the Experimental Farm. In their proclivities for apparently aimless, erratic wandering, this species is just like the Waxwings, and they also share the same breeding range. Bird-lovers here consider themselves fortunate in having seen these two rare species in one winter, which perhaps will not happen again in a life-time. Many observers in other places look for these birds diligently all their lives and never see them.

Besides these, our more common, but none the less equally welcome winter visitors, the Pine Grosbeaks (Pinicola enucleator), are here again in numbers. They too are most numerous in the same general district, where the first two stayed. When one sees below a rowan tree debris of berries lying about, he may be sure that some of these birds have been there eating, or are still there. When eating, which they nearly always do, they are very silent, and it sometimes takes a good hard look to discover them

in the trees, even when these are without leaves. These birds

were seen as late as February 25th.

The White-winged Crossbill (Loxia leucoptera) was here in great numbers late in fall and some at least must have remained for the winter, because on February 8th, a part of one was found at the Experimental Farm by Mr. Groh. The other part had just been eaten by a Northern Shrike. This cross-bill is in its wanderings and appearances almost just as unreliable and erratic as the first two species named.

Of similar habits, only not to the same degree, are the Redpoll (Acanthis linaria) and the Pine Siskin (Spinus pinus). Both of these little birds have been here this winter in more than usual numbers. Even three of the rare Hoary Redpolls (A. hornemannii exilipes) were seen January 24th in a yard on Wurtemberg Street.

An extremely rare freak in nature was seen by the writer on January 19th on Rideau Street. In a flock of English Sparrows nearly at his feet, was a red English Sparrow. Nor was the red over only a small area, or of an indistinct, brownish hue, but very bright and general. It was a crimson shade below, like the red of the male Pine Grosbeak, and a brick-red like the American Crossbill on the back. Otherwise, in size, build, shape and behavior, he was like the English Sparrows in whose company he was; also, the wings and tail were like those of this far too common denizen of our streets. For several reasons it is not likely that this bird was a hybrid between the common sparrow and, say the Purple Finch or one of the Crossbills. It must, therefore, have been a case of erythrism, like there are cases of melanism and albinism. In fact there are usually some albino or partly albino English Sparrows to be seen in winter in our streets. as during this winter, when some with large patches or a collar of white have been seen near By market.

A first record for Ottawa is the occurrence, November 2nd, of several King Eiders (Somateria spectabilis). Four of these were shot and mounted. On December 2nd another flock of 75, mostly young ones came up the river and stayed for a while near some of the boathouses on the river. Ten of these were shot by the ever present gunners. The remainder went up the river and were observed as far as Pembroke. Ont.

Finally, those mysterious wanderers from far northern shores, the Brunnich Murre (*Uria lomvia*), appeared again, December 1st, when six were seen. On the 19th of the same month they came in large numbers, about 500 being seen winging their way up the river. Many of course fall victims to the numerous gunners, with which our river seems to be lined, in and out of

season. The case of this bird is a very perplexing one. Their coming is no migration in the common sense of the word. In fact, they are lost the moment they leave salt water. All that come here and are not shot perish of starvation, as they do not seem to be able to find suitable food in any river or lake. Why they should year after year persist in coming up here to perish is hard to say.

And, to cap the climax, the Robin (Merula nigratoria) has been with us nearly all winter. A little flock of four was seen in various places up till Christmas, and then took up its head-quarters in the trees around the City Hall, where they could be seen during even the coldest days we have had. Certainly a novel sight for Ottawa.

Also, a Meadowlark (Sturnella magna) was seen in the middle of this winter, namely January 10th, at the Rifle Range. Why these birds, which are not supposed to winter here, stayed here this winter, or came here is hard to tell. Did they know the winter would be a mild one?

MEETING OF THE BOTANICAL BRANCH.

Held at the residence of Mr. E. R. Cameron, 21st December, 1908. Present: Prof. J. Macoun, Dr. Ami, Rev. G. Eifrig, Dr. Blackader, and Messrs. Cory, E. R. Cameron, J. M. Macoun, W. T. Macoun, Attwood, Whyte, MacMillan, D. Cameron, Jacombe, Witten, Bond and Groh.

The first part of the evening was devoted to some subject of general botanical interest. Prof. Macoun exhibited a copy of the newly-issued edition of Grav's Manual, and gave some explanation of the need which existed for such a work, as well as some interesting information about the methods and painstaking labor by which it had been brought to its present revised In order to cover a more natural floral area than heretofore, it was necessary to make exhaustive explorations of the Eastern portion of Canada so as to include its flora. Likewise, in order to bring the work into line with recent ideas of classification and the latest findings of botanical science, the sequence of the families has been entirely changed, and changes in nomenclature have been adopted. Prof. Macoun referred to Britton and Brown's botany as an effort to forestall this work, but considered that this was such a superior and admirable book that it should be everywhere welcomed.

Prof. Macoun also spoke about the Ottawa Flora which he is engaged in preparing. He invited all members who have collected in the Ottawa district, to furnish lists of plants in their collections, so that every reliable record might be included and

due credit be given.

The remainder of the evening was given up to a discussion of forestry methods, which was also introduced by Prof. Macoun. He held that the hope of re-afforestation depends upon following Nature's own method. In Nature, uncovered areas first grow up to small stuff of the poplar type, which after a time is gradually displaced by conifers and other valuable trees. Forestry was

astray in its efforts if it did not recognize this principle.

In reply Mr. MacMillan, of the Forestry Dept., agreed that Nature's methods must be studied, but maintained that those are the lines now being followed in tree planting. Tree planting, however, is only a very insignificant part of forestry in a country like Canada. The forestry problem here is such a large one that for the present little can be undertaken beyond studying the conditions with a view to properly husbanding and protecting the existing forests, by scientific lumbering operations and fire protection. Fires are the greatest scourge of the forest, and carelessness and indifference are largely responsible for the loss from this cause. Settlers are willing that they should run their course, so long as their personal property is not endangered. The fire which destroyed Fernie was burning in the woods for a month before that disaster. Vancouver Island will soon be without forests and without vegetation if fires are allowed to burn unchecked, as they were last summer. Mr. MacMillan remarked that there is no timber of export size on the east slopes of the Rockies to-day. Prof. Macoun stated that in 1879 from Mattawa to Winnipeg, and from Kananaskis to Vancouver was continuous forest, where now only isolated patches remain.

The proof sheets of a list of Herbaceous Perennials at the Central Experimental Farm were shown by Mr. W. T. Macoun, and Mr. Eifrig exhibited a number of European plants collected

during the past summer.

H. G.

AN EARLY BAT.

A specimen of the Brown Bat was captured by Mr. Walter Venner, of Quebec, as it was flying about the corridors of the Parliament Buildings during the evening of February 24th. The warm weather of that or the previous day had probably caused it to leave its winter quarters. This species Vespertillo fuscus, Beauv., is common in the vicinity of Ottawa, but the occurrence of an active specimen at this season of the year seems worthy of record.

J. M. Macoun.

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