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May, 1887.

THE
* OTTAWA NATURALIST *

VOLUME I. No. II.

The
TRANSACTIONS
Of the
* Ottawa Field-Naturalists' Club *

(Organized March, 1879. Incorporated March, 1884.)

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1887.

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PRESIDENT'S ADDRESS.

PROF. JOHN MACOUN, F.L.S., F.R.S.C., ETC.

(DELIVERED 13TH JANUARY, 1887).

Members of the Ottawa Field-Naturalists' Club, Ladies and Gentlemen :

Shortly after my election last year my duties called me away to London, England, where I remain eight months. In consequence of this I took no part in the field work of the Club during last summer. That I might judge of the work of other organizations doing work similar to ours, I attended meetings of the Croydon Field-Naturalists' Club and by this means am enabled to compare our mode of procedure with theirs. With that object in view I will give my impression of a trip to the North Downs, in Surrey, on Whit Monday, May 29th, 1886.

A large party, many of them specialists, assembled at East Croydon station about 9 a.m. and took the train for Oxsted, a village to the south of the North Downs. A tunnel of great length pierces the Chalk hills and only a few minutes elapsed before we were at our station about 14 miles from Croydon. Amongst the company were specialists in almost every branch of Natural History, and although most of those present were city men I saw at a glance they were widely different from the majority of those who attend our outings and belong to our city. Without exception every man entered into the business of the day with the zest of an enthusiast and went to work with a will. After a few moments' conversation it was decided that we should separate into smaller parties and meet for lunch at Buckley Clump, on the summit of the North Downs, which is a range of chalk hills lying between the Weald of Kent and London. We now separated into smaller groups, and while some kept along the main roads others went by lanes and paths through a beautiful and diversified country, while the party to which I attached myself rambled through the woods which covered the upper part of the slope, where we collected entomological and botanical specimens to our hearts' content.

Shortly after noon we all assembled at the "Clump" of beeches, and as we lay around in the shade or sat on mossy couches beneath the trees, eating our lunch and discussing the various beauties of the landscape, gentlemen acquainted with the topography and various villages

and country seats which lay at our feet or in the dim distance, pointed out everything of interest and explained every seeming difficulty, so that two hours passed away in the most pleasant and profitable manner.

The party now grouped themselves and an amateur photographer took pictures of the various parties. These were developed later in the summer and distributed to the various members. After this we divided into two parties, one of which was to return to Croydon by train, the other to walk across country through lanes and by-paths to Croydon, a distance of over 12 miles. My friends choose to walk and I perforce accompanied them. The remembrance of that walk will live in my memory as long as life lasts, for in it I made the acquaintance of English country scenery and Englishmen out for a holiday. It is not my purpose to describe English scenery, nor to enter into details concerning its beauties, but to point out the difference between Englishmen and ourselves, when on an excursion.

The average Canadian loves a picnic and delights to ride in a waggon along dusty roads to a point eight or ten miles away, eat a hearty lunch, take a short stroll, eat again, get into the conveyance, drive back to the city and talk about the Field-Naturalists' Excursion. The above is our plan. Can we not improve on this, and although we may ride out as usual, could we not do more walking and collecting and arrange for at least the active members of the Club making all-day excursions by going out ten or twelve miles from the city by rail or waggon and returning across country on foot.

While I do not wish to condemn ourselves for our want of desire to walk in the hot sun, I cannot help praising the Englishman for his enthusiasm in entering upon these excursions with a characteristic zest. If the excursions organized by us be fair examples of what is done in other parts of our country I should advise a new departure and strongly urge on the active members of the Club to form an inner circle and have excursions of their own where they can explore and investigate new districts and gather additional material for more fully elucidating the Natural History of our district.

The love of Natural History, which is self-evident in England, must arise from the familiarity of both young and old of all classes

with the various objects of Natural History found in public gardens and museums established in every part of the kingdom. That this is the case was shown by the almost universal custom of wearing flowers, making collections of Natural History specimens, or having pets of various kinds in the houses. While in England, however, I paid most attention to my own branch of science, and to botany will chiefly direct your attention to-night. To-day in every part of the world except Canada Botanic Gardens have been established. Economic and other museums have been called into existence and the natural vegetable products of the various countries are exhibited under the same roof. Many visits to the Royal Gardens at Kew, near London; to the Botanic Gardens at Birmingham and at Dublin, convinced me that the present movement to establish experimental farms in Canada was a step in the right direction; but the cultivation of our native trees, shrubs and herbaceous plants should be considered of equal importance and receive special and prompt attention. In all of the gardens mentioned the native plants of each order are planted according to their relationships, and students and others can obtain a great deal of useful information without much labour or loss of time. When walking with botanists and others through the arboretums in England and Ireland I had to make the humiliating confession that in Canada we had no such thing, and that very few of our people knew one tree from another. You may think this unfair, but how many of us could tell the names of one quarter of the 65 species of trees growing without cultivation in Ontario. Besides the Botanic Gardens nearly every city has an Economic Museum in which are exhibited the various products used in the arts; also the fruits, seeds, leaves, bark and wood of the native shrubs and trees, besides those of other countries.

Before I left for England I was told that a collection of small billets of wood was of little moment, and that our collection of birds would only cause laughter in the British Museum, where all these were represented. But what were the facts? When our 108 species of native trees were contrasted with 14 British species, and our magnificent display of game and other birds was studied by men who had visited every clime, a unanimous verdict was given in our favour.

My hearers may be surprised, but I am correct in stating that we made a far better exhibition of our Natural History in England than we do in any part of Canada, and it is a standing reproach to us that we have never yet had anything approaching to a complete representation, and more still, we have never had a place to put such a collection in if we had made it. It is altogether different in the United States. As that country has developed museums have been established, specialists appointed to take charge of the various branches, and to-day they have a staff of specialists second to none in the world, ready to tackle any subject of importance to the country.

A few years since the report got abroad that the fisheries along the American coast of the Atlantic were giving out. At once a commission was appointed and in the course of a few years reports were published giving every detail of the work, and not only reporting on the various species of fish but on their food likewise. The results of these investigations are placed in the National Museum at Washington. The raising of cattle on the "great plains" becomes a business of national importance, and a specialist to study the pasture grasses and a chemist are appointed and attached to the Bureau of Agriculture at Washington. Various diseases attack the growing crops, insects commit ravages, and in every case men are set to work to investigate, collect and classify; bulky volumes are published and the knowledge spread broadcast over the land, while the objects themselves are placed in museums for the instruction of the people. My work has caused me to come in contact with these specialists, and through them I have learned the value of these stores of Natural History and other objects which are being gathered together at Washington. It is painful to confess that all our best specimens, whether mineral, animal or archaeological, are going to Washington, and the apathy of our people is such that I see no help for it.

I have learned the value of these collections, and my English visit has been so convincing that I consider silence concerning our position a virtue no longer, and take the present occasion of laying our case before an Ottawa audience in the hope that we may arouse attention to a question that is truly a national one. After much opposition the headquarters of the Geological Survey were removed from Montreal

to Ottawa and a museum was established, which to-day does honour both to its curators and the Canadian people. Owing to the immense collection of minerals and fossils brought from Montreal and gathered since, geology and mineralogy almost monopolize the limited space, and Natural History is left to take care of itself. At present a small room is devoted to mammals and birds, while the insects and plants of the Dominion are placed in the halls, there being no room for them elsewhere. At South Kensington we had a collection of mammals, birds, fishes and woods which did credit to the country, and yet here in our own Capital we have not room for a tenth of what was there exhibited. These collections are, at least in part, on their way here, and the question naturally arises, what will be done with them? This question is to be answered, and the public should speak and the citizens of Ottawa take action. Instead of having separate collections of minerals, fossils, vegetables, birds, fishes, mammals, etc., we should have one grand museum that would include every branch of Natural History and economic science, archæology, ethnology and geology; and were the proper representations made to the Government, we should see rising in some conspicuous part of our city a building designed for a museum, which would be the crowning glory of the greatest man Canada has yet seen or may see for a century—Sir John A. Macdonald—whose name since I was a boy has been a household word in Canada for progress in every direction. And now let him in his declining years give us a building for Canadian science which will be a credit to our city and a lasting monument to his enlightened statesmanship. I cannot here enumerate the many advantages which would necessarily be derived by the city and the country at large, through the establishment of such a museum, and can only refer to the vast benefits it would confer upon students and the citizens generally. In conclusion I would urge upon the Club the necessity of increased energy and activity. The desire and aim of the Club have ever been to encourage and enlighten the youth of the city on scientific subjects, and whatever position it may take on the question of amalgamation with the Literary and Scientific Society my warmest sympathies are with those who feel that they are both able and willing to take an independent stand and to shoulder the responsibilities such action may entail.

REPORT OF THE ENTOMOLOGICAL BRANCH.

To the Council of the Ottawa Field-Naturalists' Club :—

In entomological work we have to record some increase of activity. Sub-excursions were held weekly throughout the season, at which at least one of the leaders was always present. While valuable and extensive collections and records were made in nearly all of the orders of insects, the Hymenoptera and Lepidoptera received special attention. A few facts are given regarding the collections in each order.

HYMENOPTERA.—It was announced last year in the report of the branch that a number of species new to Canadian lists had been already collected at Ottawa, and that Abbé Provancher had determined some of the captures to be species new to science. He has since published in "Le Naturaliste Canadien" descriptions of many new species contained in the division Terebrantia, which includes saw-flies, ichneumons, gall-forming, flies, etc. In this extensive division the Ottawa collections have already yielded nearly 100 new species, besides many species not hitherto recorded from Canada, and some of great rarity.

The collections made during the past summer have as yet been only partially classified, but it is found that many species not formerly observed have been captured.

Oryssus Sayi, Westw. was found upon old maple trees near Hull, both emerging from, and ovipositing in, the dead trunk. The life history of these generally rare insects was, we think, not before definitely known. *Xiphyltria albicornis* was again common in the city, where it oviposits in our maples, especially attacking the trees which have been newly set out along the streets. *Selandria rosæ*, the rose saw-fly or slug, was unusually abundant. At the recent excursion to Buckingham it was seen in large numbers, and on roses beyond Hull it was very destructive. In the city it did much damage. *Eraphytus maculatus*, the strawberry-sawfly, also appeared to be more common than usual. *Messa hyalina* was bred in large numbers from the galls which cover and disfigure the leaves of the willows which have been planted by some of our citizens.

LEPIDOPTERA.—The season was decidedly a bad one for butterflies and moths. Bright, hot days were few, and when they did occur there

was generally too much wind for large collections to be made. On 22nd May an expedition was made to the locality for *Thecla Nippon* at Chelsea, and several specimens were secured. On the same day the spring broods of *Argynnis Bellona* and *A. Myrina* were observed, as well as the winter form *Hemulis* of *Pieris Oleracea*. Good specimens of *Lycæna Lucia* and *L. Viola* were also collected.

Several unsuccessful attempts were made to find *Fenesica Tarquinius* in the locality where Mr. Hanham found it abundantly in 1879.

On 1st July a sub-excursion of the branch visited the Mer Bleue where *Chrysopharus Epixanthe* and *C. Thoe* were collected in numbers, and the first specimen of *Grapta Interrogationis* was recorded for this locality. This species was subsequently bred in its two forms *Fabricii* and *Umbrosa* from larvæ collected on *Ulmus Americana*. The *Theclas*, usually so abundant upon the flowers of *Rhus Typhina* and *Asclepias Cornuti* in the first part of July, were conspicuous by their absence. This scarcity was also a noticeable fact concerning the common Clouded-Sulphur butterfly *Colias Philodice*. Not half a dozen specimens of the spring brood were seen, and it was very scarce in the autumn also. The only insect which was at all abundant was *Danais Archippus*.

A few interesting captures of moths have to be recorded. *Harrisimemna trisignata*, parent of the remarkable Zigzag Caterpillar, was taken at light, and *Platycerura furvella*, a rare moth the larva of which feeds upon *Pinus Strobilus*, was bred from larvæ taken last summer at Hull, P.Q. This locality still ranks amongst the highest as a rich collecting ground. Here *Agria exitiosa*, the peach borer, was observed by Mr. Harrington for the first time in this locality. The raspberry root borer, *Agria rubi*, was too abundant in many gardens at Ottawa. Some fine specimens were bred from garden raspberries, the canes of which were in many quarters badly injured. Cutworms were not so abundant as usual. *Halena devastatrix*, however, was most frequently complained of, and did a considerable amount of damage. Another interesting species of this genus, *H. mactata*, was bred by Mr. Harrington from the flowers of *Cypripedium spectabile* which it had attacked severely in Dow's Swamp.

The item of most interest, however, which was observed during the past year was the increase and extension of the colony of the maple

—leaf—cutter, *Incurvaria acerifoliella*, which was mentioned in last year's report. This colony is in Beechwood near the cemetery and now covers more than double the space it did last year. Maple trees for a space of about 10 acres were during last autumn entirely defoliated by the minute case-bearing caterpillars of this moth. The perfect insect was taken at the excursion to Buckingham on 3rd June.

DIPTERA.—The season appeared to be very unfavourable for flies, and collections were correspondingly small. Mr. T. B. Caulfield, of Montreal, has determined for us a number of species, and we have yet many to be identified, before it would be advisable to publish a list. Endeavours will be made during the present year to enlarge our knowledge of this order. Mention may be made of the breeding of *Poila rosæ*, a small fly of which the grub bores in carrots, and which frequently does much injury to these roots. It has not been recorded previously from Canada.

COLEOPTERA.—The collections in this order include some additions to our lists. At the Buckingham Excursion a fine specimen of *Anthophilax malachiticus* was taken upon a birch tree in the grove near the river. At Meech's Lake specimens of a species of *Microrhopala* were taken on raspberry bushes. The species has not yet been finally determined, but this is the first instance of finding members of the genus in this locality. A number of other interesting additions was made to our local list.

ORTHOPTERA.—Our members have hitherto somewhat neglected this order, which includes some of our common injurious insects. Mr. Caulfield, of Montreal, who is at present working in this order, has named a few species which were referred to him, and expresses his willingness and desire to examine any specimens which our members may wish to refer to him.

HEMIPTERA.—Collections in this order were small, but these contain two species not hitherto recorded in Canada. Abbé Provancher is now publishing in his magazine an account of the Canadian species and he has determined many of our specimens, and has still some in his possession for that purpose. So far, over 100 species are known to occur here.

NEUROPTERA AND PSEUDONEUROPTERA.—The work of collecting in these orders was vigorously kept up during the whole collecting season by several members of the Club with gratifying results. Many beautiful specimens of known species of both orders were taken. The insects belonging to Pseudoneuroptera were more largely represented, especially of the families Odonata, or Dragonflies, and Ephemera, both of which were unusually abundant during the past summer. The full extent of the work accomplished will not be definitely known until a few of the rarer and more difficult species have been worked up. It is quite evident, however, that valuable additions have been made to the Canadian lists and that some of the insects now in hand will have to be described for the first time. Much greater difficulty is experienced in working up these insects than is the case with those of several other orders of Entomology, owing to the want of monographic descriptions, while the fragile nature of some of the specimens renders it very difficult to transmit them by mail.

W. H. HARRINGTON.

JAMES FLETCHER.

T. J. MacLAUGHLIN.

Leaders.

February 10th, 1887.

TRANSACTIONS.—If any member, or correspondent has failed to receive any part of the Club's publications which should properly have been sent to him, a memorandum should be sent to the Librarian—Mr. T. J. MacLaughlin (Public Works Department)—notifying him of its non-arrival.

NEW MEMBERS.—1. A. P. Low; 2. D. E. Smith; 3. R. H. Cowley; 4. R. G. Code; 5. Arthur G. Forward; 6. Wm. Scott; 7. F. A. Gordon; 8. W. T. Lawless (Hull); 9. B. T. A. Bell; 10. John D. Evans (Trenton); 11. Thos. Gilmour; 12. J. T. Bowerman; 13. Robt. Gansby (Guelph); 14. James Clark (Renfrew).

LIBRARIAN'S REPORT, 1886-87.

To the Council of the Ottawa Field-Naturalists' Club:—

From the date of my accession to the office of Librarian to the present time, I have received in exchange for the Transactions of the Club the following, among other valuable publications:— * * *

(The list has been deemed too long for insertion; it enumerates some fifty volumes received from thirty-five of the leading scientists and scientific bodies in Canada, the United States and England, including the Geological Surveys of the two first mentioned countries. Future contributions to the library will, under the present plan of publication, be announced monthly).

Our exchange list requires revision. Certain publications with which we formerly exchanged have ceased to exist. With others, not yet on our list, arrangements could probably be made which would result in several desirable additions to our library.

The free list should also be carefully revised. Not a few who receive our Transactions are so negligent as not to acknowledge the favour. I would suggest that the names of such persons be eliminated from the free list.

I desire to point out that the accommodation provided for our exchanges is altogether inadequate, and steps should be promptly taken to provide an additional book-case large enough to hold not merely the gifts we may receive during the next few years, but also the back numbers of our Transactions.

F. R. LATCHFORD.

OTTAWA, March 14th, 1887.

REPORT TO THE ROYAL SOCIETY OF CANADA,

Read at the Fifth General Meeting, May, 1886.

In presenting to your Honourable Society the Fourth Report from the Ottawa Field-Naturalists' Club, the Council has great pleasure in being able to say that its work has been carried on with increased and gratifying success. The Club has at present over 170 ordinary and seven corresponding members, making it numerically one of the strongest Scientific Societies in the Dominion; and as regards original work performed by the members, it can compare favourably with any similar society.

The usual Excursions to places of interest in the vicinity were held at intervals during the summer, and many valuable facts concerning the Natural History of this district were recorded.

Much useful work was also accomplished at the Sub-excursions which were held on Saturday afternoons to points in the immediate neighbourhood of the city. These Sub-excursions are of the character of out-door classes, and are conducted with a view to enable the younger and less experienced members to study the different branches under the guidance of the appointed leaders, whose duty it is to give any assistance and explanation that may be necessary.

During the winter six Soirees were held. One was an evening devoted to the microscope, at which short papers were read and slides exhibited illustrative of the different subjects; while at the others the following papers were read:—"The President's Address," Mr. W. H. Harrington; "The Black Bear," Mr. W. P. Lett; "Water Crystallization Effected by Magnetism," Mr. E. Ollum, (Pembroke); "A New Departure in the Study of Minerals," Rev. C. F. Marsan; "Ottawa Dragon Flies," Mr. T. J. MacLaughlin.

In addition, there were Reports from the Leaders, of the work done during the year in the various departments of Natural History, and notes by members. These, as well as the papers read, were followed by discussions of an interesting nature, which are a distinctive feature of the Soirees.

Afternoon lectures were also given during the winter on the following subjects:—

Entomology—Three by Mr. Harrington, two by Mr. Fletcher.

Mineralogy—One by Rev. C. F. Marsan.

Ornithology—One by Mr. W. L. Scott.

Botany—Three by Prof. Macoun, and two by Mr. R. B. Whyte.

The five on Botany were delivered before the students of the Normal School by request of Principal McCabe.

In addition to these lectures, and at the request of the Inspector of Public Schools for Ottawa, a weekly class in Botany has been organized as part of the regular instruction for the senior students at the Central School West. The attendance and attention displayed at this class have been most encouraging to the senior leader in botany who has undertaken the work.

The Council is much gratified to know that its efforts in the way of encouraging the study of Natural History are more appreciated. The attendance at the Soirees, the Excursions and the Classes, was larger and the interest shown by those present was much more marked than in any previous year.

A copy of the Club's Transactions No. 6, containing 132 pages and two plates, is herewith submitted, and we hope that it will be found a creditable addition to our list of publications.

At the annual meeting of the Club, held on March 17th, the following officers were elected for the year 1886-87 :

PRESIDENT—Prof. J. Macoun.

VICE-PRESIDENTS—R. B. Whyte and Principal Woods.

SECRETARY—W. H. Harrington.

TREASURER—T. J. MacLaughlin.

LIBRARIAN—F. R. Latchford.

COMMITTEE—Dr. Small, J. Fletcher, Rev. Prof. Marsan.

The following leaders have been appointed :

Geology—H. M. Ami, Prof. Marsan, H. P. Brumell and W. E. T. Sowter.

Botany—R. B. Whyte, Principal Woods and Dr. H. B. Small.

Entomology—J. Fletcher, W. H. Harrington and T. J. MacLaughlin.

Conchology—Hon. P. S. Poirier and F. R. Latchford.

Ornithology—W. L. Scott, G. R. White and J. M. Macoun.

Zoology—H. B. Small and W. P. Lett.

R. B. WHYTE, *Delegate*.

EDITORIAL.

The kindly reception accorded to the first number of the OTTAWA NATURALIST, by our members and correspondents, has encouraged us in our labours. There seems to be a unanimous opinion that the change in the time of publication is a step in the path of progress, and it has been especially welcome, as was expected, to non-resident members. In the present number we are able to give the very interesting address delivered by Prof. Macoun when President of the Club last year. There are many points in it well worthy of consideration, and we feel assured that his desire to see erected a museum worthy of Canada will be warmly endorsed by every reader. A number of new members have been elected since the Annual Meeting, but we desire again to urge all to endeavor to obtain among their friends further additions to our membership. The smallness of our annual subscription fee makes it the more imperative that our membership should be large, and that fees should be promptly remitted to the treasurer, in accordance with Rule 15 of the Constitution.

The Excursion Committee has recommended an Excursion to King's Mountain, Chelsea, on Saturday, the 21st of May. Our Excursions during the season will be conducted in accordance with the plan found to work satisfactorily in past years. Prof. Macoun informs us in his address that it is a common custom in English societies similar to our own, for excursion parties to go by rail or waggon to a locality several miles distant from the starting point, and then walk back "across country," collecting along the way. As indicated by him this plan has its advantages, but it seems to us that equally good work can be done under our own system of driving, or taking a boat, or train, both ways, and spending a large portion of the day in systematic collecting in the locality visited. In this manner many pleasant days have been spent by our members and their friends, and many important facts in connection with the Natural History of neighbouring districts have been discovered and recorded. A not unimportant advantage of returning together by conveyance, instead of in small scattering groups on foot, is the opportunity afforded for instructive conversation regarding the various interesting occurrences or collections,

while at the same time needed rest is obtained after the fatigues of the day. In the Sub-Excursions, which are held on Saturday afternoons to more adjacent fields, we have true walking parties, composed both of those who have already done good work in the branches to which they devote their attention, and of those who, under their guidance, desire to enter upon the study of these fascinating subjects. It might, however, not be unwise for the leaders to act upon Prof. Macoun's suggestion, to have parties conducted upon the English plan, and consisting solely of workers. The Botanical and Ornithological Branches especially might find such tramps to afford opportunities for collection or observation, not offered by our present methods. As regards Entomology, Conchology, and probably Geology, it seems to us that much better work can be done by the careful examination of a limited area, than by traversing a distance of several miles, and making a necessarily imperfect scrutiny of the ground covered. As our Excursions are one of the important features of the Club's scheme of operations, it is desirable that they should be organized so as to contribute as largely as possible both to the store of knowledge, which we desire to gain regarding our local Natural History, and to the pleasure and instruction of those who attend them. We wish to make them a means of attracting people to the study of nature, and the Council will gladly receive from any one suggestions as to localities which might be visited.

The Botanical leaders ask for the observation and record of the foliage and flowering of our numerous species of plants, and particularly request information regarding the Polypetales. The Council has requested Mr. Fletcher to prepare for publication a catalogue of our plants with information as to the habitat of each species. On application he will furnish lists of species regarding which further knowledge is particularly needed, and we hope the members will give him their assistance toward making the records as full and precise as possible.

LIBRARIAN'S RECORD.

Since the Annual Meeting the following publications have been received in exchange for the Transactions of the Club:—

American Ornithologists Union: The Auk, Vol. IV., No. 2.

Canadian Institute, Toronto: Proceedings, Vol. XXII, No. 14.

J. A. Lintner, N. Y. State Entomologist: Report on Insects, etc., of Caledonia Creek, N.Y.; Some Sphingidæ of State of N.Y.; New species of Calocampa; New species of Grapta, etc.; Metamorphoses of Cera-tomia quadricornis; Lepidoptera of the Adirondack region; Injurious Insects of the year 1878; New Principle of Protection from Insect Attacks; Circular No 1, October, 1883; Some Injurious Insects of Massachusetts; Insects of the Clover Plant; Some New Species of Nisoniades; New Species of Eudamus; Invasion by a Pyralid Insect.

The Essex Field Club, England: Transactions, Vol. IV, part 2; The Essex Naturalist, Nos. 1, 2, 3.

Cincinnati Society of Natural History: Journal, Vol. X, No. 1.

Torrey Botanical Club: Bulletin, Vol. XV, Nos. 3 and 4.

New York Microscopical Society: Journal, Vol. II, Nos. 9 and 10.

Miss E. A. Ormerod: Report No. 10, on Injurious Insects; The Hessian Fly.

Entomological Society of Ontario: Canadian Entomologist, Vol. XIX, Nos. 1 and 2.

Sir Wm. J. Dawson, McGill University: Fossil Plants of the Laramie Formation.

Cambridge Entomological Club: Psyche, Vol. IV, Nos. 135-137.

J. B. Smith, National Museum, Washington: Revision of the Saturniidae.

Johns Hopkins University: Circulars, Vol. VI, No. 56.

Natural Science Association, Staten Island: Proceedings, Extra No. 6.

Brooklyn Entomological Society: Entomologica Americana, Vol. II, No. 12.

ANNOUNCEMENTS FOR MAY.

EXCURSION.—The first General Excursion of the season will take place on Saturday, the 21st of May. The place selected for this excursion is King's Mountain near Chelsea, which has always been a favorite spot with our members. As no circulars regarding this excursion will be issued, except in the event of its postponement through any unforeseen cause, the members are requested to keep it carefully in mind. The Committee would like to have, not later than 19th, the names of all who will be present, in order that the requisite vans may be secured. Tickets may be obtained through any member of the Council at the following prices: Members 50 cents, non-members 60 cents, children 30 cents. The Club vans will start from the corner of Rideau and Chapel streets at 8.45 a.m. and from the corner of Sparks and Bank streets at 9 a.m. sharp. The council desires to see a large attendance of members and their friends. It is expected that the date selected will offer a very favorable opportunity for botanical collections.

SUB-EXCURSIONS.—The Botanical leaders have arranged the following Sub-Excursions for May:—Saturday, 7th, to McKay's Lake. Saturday, 14th, to Billings Bridge. Saturday, 28th, to Cave Creek, Richmond Road.

As in former years, they will leave the Post Office at 2 p.m. punctually. In addition early morning outings will be held, and those wishing to take part in such will please communicate with the leaders. Members interested in this Branch are requested to record the dates of the first and last flowering of plants, when they occur in greatest profusion, the localities where observed, and such other data as they may think of value. Information regarding the Polypetalæ is particularly desired, as it is the intention of the Council to issue a revised catalogue of local plants, the first portion to contain this division.

The leaders of the Geological Branch will attend the Sub-Excursion on 7th, and those of the Entomological Branch have decided to accompany the Botanists on 14th and 28th.

During the meeting of the Royal Society of Canada, which commences on 25th May, there will probably be a special Sub-Excursion of the Geological Branch, for Fellows of the Society interested in that science.

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BOOK LIST.

- Studies of Plant Life in Canada, by Mr. C. P. Trail
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