JULY, 1907 VOL. **********, No. 4

THE

OTTAWA NATURALIST

Published by The Ottawa Field-Naturalists' Club.

CONTENTS.

	PAGE
Fungi from the Kawartha Lakes, including several new Species,	
by Cephas Guillet, Toronto	57
New Brunswick Flycatchers, by Wm. H. Moore, Scotch Lake, N.B.	60
Meetings of the Entomological Branch	65
Leucobrephos Middendorfi, Men	67
Sub-Excursions	68
Note on the European Carp, by Andrew Halkett	71

ISSUED JULY 31, 1907.

OTTAWA, CANADA; THE ROLLA L. CRAIN CO. LIMITED WELLINGTON ST.

Entered at the Ottawa Post Office as second class matter.

JAMES OGILVY,

Bookseller, Stationer and Publisher 63 Sparks St.

JARVIS' "THE BOOKSTORE" Phone 732

"THE BOOKSTORE" SELLS GOOD BOOKS

A. G. PITTAWAY **PHOTOGRAPHER**

58 Sparks St.

CORNER

THE BUSY

THE BUSY STORE

LIMITED

MACS

OTTAWA



ASK FOR OUR CELEBRATED

FLOOR AND HOUSE PAINTS

MADE IN OTTAWA

OTTAWA PAINT WORKS

Phone 395

138 Bank St.

SLEEPING BAGS @

OTTAWA, CANADA

Wholesale Manufacturers Lumbermen's and Contractors' Supplies.

Outfitting Survey Parties.

Exploration and Outing Parties of any kind,

A Specialty

We have complete lines of Tents, Tarpaulins, Flags, Clothing, Footwear, Snowshoes, Axes, Pipes and Smallwares.

Write for particulars

ROONEY & COOPER TAILORS

(Ladies and Gentlemen)

Your Patronage Solicited

67 Sparks Street Ottawa

THE BANK OF OTTAWA

Head Office and Main Branch Wellington Street, Ottawa

LOCAL BRANCH OFFICES

Cor. Bank and Gloucester Sts. Cor. Bank and Gladstone Ave. Cor. Bank and Fourth Ave. Rideau Street Somerset Street Main Street, Hull, Que.

At each of the above named offices, savings accounts may be opened with a deposit of \$1 and upwards, on which interest will be al-

A. ROSENTHAL & SONS, LTD.

IEWELLERS AND OPTICIANS

Goldsmith's Hall

Ottawa

R. H. KENNY & CO.

HIGH CLASS TAILORS

96 Bank Street

Ottawa

INSURE IN

Mutual Life of Canada

H. MOONEY & SON

General Agents III Sparks Street

Ottawa

SPORTING

52, 54, 56 BANK STREET

AUTOMOBILES AND GASOLENE LAUNCHES

BRYSON, GRAHAM & CO.

GRAVES BROS. FINE HARDWARE

Large Assortment of Fishing and other Sporting Goods.

Camp Supplies.

Cor. Sparks and Metcalfe Sts., Ottawa.

Birks' Silverware is different. It possesses more originality and grace in design, more quality in material and finish than the average run of silverware, and is always substantial in weight and never varies.

HENRY BIRKS AND SONS LIMITED

57-59 SPARKS ST. OTTAWA

When in want of High Grade Furniture Call and See Our Stock

We are SOLE AGENTS for the Celebrated CREX PRAIRIE GRASS FURNITURE

STEWART & CO.

34 Rideau Street Just Below the Bridge

Library Bureau of Canada

HEAD OFFICE-201 QUEEN ST., OTTAWA, ONT. BRANCHES-Toronto, Montreal and Winnipeg.

Inventors of the Card System, Vertical Filing and various Office Devices.

Special Insect Cases and Natural History Cabinets made to

The Wright Floral Company, Limited

Stores: 54 Sparks Street 285 Bank Street

Telephones: Day 1793 Night 425B

Choice Flowers and Plants

Exclusive Floral Creations

MARTINEORME

Sold only by Orme & Son, Limited P TANGS

189 Sparks Street

AN ENORMOUS PLANT

The growth of the Singer Plant, which is now more than 50 years old, has been something marvellous. Its product is used in every civilized country and the dem and for it throughout Canada alone has become so great that a factory covering 45 acres of ground has been established at St. John's, P.O.



FOR SALE AT SINGER STORES

ALL OVER THE WORLD

Store in Ottawa, Ontario-

140 Sparks Street ZE



Singer Sewing Machine Co.



THE OTTAWA NATURALIST

VOL. XXIII.

OTTAWA, JULY, 1907

No. 4

FUNGI FROM THE KAWARTHA LAKES (AND A FEW FROM TORONTO) INCLUDING SEVERAL NEW SPECIES.

by CEPHAS GUILLET, TORONTO.

During August, 1905, the present writer traversed the Kawartha Lakes in a canoe between Stony Lake and Coboconk. This beautiful region, lying in Peterboro and Victoria counties, is about sixty miles north of Lake Ontario, and 800 to 900 feet above the sea. The following August a less extensive trip was made from Stony Lake to Deer Lake. During these outings a large number of fungi were collected and dried, notes having first been taken upon the specimens in a fresh state. The specimens, with the notes, were sent to Dr. C. H. Peck, New York State Botanist, an eminent authority on fungi, who very kindly identified those given below. Several species new to science were found among them, which Dr. Peck has named. A few fungi were also collected in or near Toronto. As comparatively little has been published regarding the fungi of Canada, the following list may be of interest to readers of The Naturalist. One may add that a little work of this kind, which anyone may do, greatly increases the interest of such outings, already delightful, and adds a pleasing, if slight, altruistic motive.

Lachnea scutellata (L.) Sou. (a cup-fungus).

Thelephora willeyi, Clint. Clavaria gracilis, Pers. Clavaria muscoides, L.

According to G. T. Atkinson, (in "Mushrooms") all corallike or club fungi (Clavariaceæ) are edible, though a few of them, and these mostly the small species, are rather tough. All puff-balls likewise (Lycoperdaceæ) are edible so long as they are quite white inside, though some are better than others.

Fomes leucophaeus, Mont. Polystictus hirsutus, (Wulf.) Fr. Polystictus pergamenus, Fr. Polyporus weinmanni, Fr. Polyporus elegans, Fr. Polyporus albellus, Pk.

Polyporus picipes, Fr.

Poria vulgaris, Fr.

Favolus europaeus, Fr. (F. canadensis Kl.)

Lenzites sepiaria, Fr.

Boletus scaber, Fr. (edible).

Boleti americanus, Pk.

Cant' arellus umbonatus, Fr.

Partilus involutus (Batsch.) Fr. (edible).

Coprinus plumbeus, Pk.

Hygrophorus mineatus, Fr. (edible).

Russula fragilis, Fr.

Russula fallax (Schaeff.) Fr.

Lactarius chrysorrheus, Fr.

Lactarius paludinellus, Pk.

Lactarius subdulcus (Bull.), Fr.

Schizophyllum alneum, L. (S. commune Fr.)

Marasmius rotula (Scop.), Fr.

Marasmius elongatipes, Pk.

Marasmius siccus, Schw. Panus stipticus (Bull.), Fr.

Lentinus spretus, Pk.

Amanitopsis vaginata (Bull.), Rose. (edible).

Lepiota granulosa (Batsch.), Fr. Armillaria mellea, Vahl. (edible).

(Another Armillaria Dr. Peck thinks a new species, but fears

to describe or name from the one specimen secured).

Agaricus silvicola, Vitt. (edible).

Stropharia semiglobata (Batsch.) Hypholoma hymenocephalum, Pk.

Flammula spumosa, Fr.

Flammula flavida, Fr.

Inocybe subtomentosa, Pk.

Pleurotus decorus, Fr. (Clitocybe decora [Fr.]).

Pleurotus ostreatus (Jacq.), Fr. (edible).

Crepidotus fulvotomentosus, Pk. Panaeolus campanulatus (L.) Fr.

Pluteus cervinus (Schaeff.), Fr. (edible).

Pluteus tomentosulus, Pk.

Clitopilus albogriseus, Pk.

Leptonia serrulata (Pers.), Fr. Leptonia subserrulata, Pk.

Omphalia fibula (Bull.), Fr.

Omphalia campanella (Batsch.), Fr.

Omphalia curvipes, n. sp. 2nd August, 1905; Horseshoe Island, Stony Lake; growing out from underneath or side of very rotten log, and turning so as to have the gills downward.

Omphalia vestitus, n. sp. Latter part of August, 1906; Horseshoe Island, Stony Lake; on the ground in low places near the water.

Clitocybe nobilis, n. sp. 8th August, 1905, and 21st August, 1906; south shore of Deer Lake near and west of Victoria Spring; growing solitary or two close together on the ground in a little clearing. The writer has given specimens to Dr. Peck, who calls it "a fine new species,"

and to Toronto University.

Clitocybe ectypoides, Pk. Of several of the specimens of this species which I sent to Dr. Peck, he says: "They appear to be a small smooth variety of Clitocybe ectypoides Pk. The radiating fibres on the pileus in the type-form are absent in this form, with which I have not before met." They were found 16th August, 1905, near Cliff Spring, south shore of Pigeon Lake, on a rotten log.

Clitocybe eccentrica, Pk.
Clitocybe laccata (Scop.), Fr. (edible).
Clitocybe laccata pallidifolia, Pk.
Clitocybe adirondackensis, Pk.
Clitocybe albissima, Pk.
Tricholoma rubescentifolia, Pk.
Tricholoma albiflavidum, Pk.
Mycena epipterygia (Scop.), Fr.
Collybia dryophila (Bull.), Fr.
Collybia confluens (Pers.), Fr.
Collybia radicata (Relh.), Fr. (edible).
Collybia radicata furfuracea, Pk.

Collybia hirticeps, n. sp. 23rd August, 1905; south shore of Pigeon Lake, near Cliff Spring; growing in a tuft of about eight on a rotting branch in the woods. Dr. Peck says it is allied to C. zonatus Pk.

Collybia stipitaria campanulata, n. var. 30th August, 1905; Horseshoe Island, Stony Lake; growing from the bark on a fallen young arbor vitae, in a dark hollow. Dr. Peck writes that he found the same variety in N. Y. State in July of the same year, growing on arbor vitae branches. He had not yet published it when he wrote. The description of this new fungus will doubtless be given in the N. Y. State Report. Descriptions of Clitocybe nobilis and Collybia hirticeps have been published by Dr. Peck in the Bulletin of the Torrey Botan-

ical Club, 34: 1907, pp. 97 and 98. Descriptions of the other new species will appear later.

Cyathus striatus (Huds.), Hoffm. (a bird's nest fungus).
Fuligo ovata (Schaeff.), Macbr., or as given in Saccardo
Fuligo septica (L.) Gmel. This is one of the interesting
Myxomycetes or slime-moulds, an intermediate group
of organisms with relationships both to plants and to
animals. "In their spore-producing stage," says
Underwood ('Moulds, Mildews, and Mushrooms'),
"they resemble the fungi, but they are not true fungi.
In their vegetative or growing stage they resemble
certain of the protozoans, but they are not true animals."

TORONTO SPECIES.

Sarcoscypha coccinea, Jacq. May, 1907. The common scarlet cup-fungus found on sticks in woods in early Spring, and sometimes late in the Fall.

Coprinus micaceus, Fr. 27th July, 1905 (edible). Panus stipticus (Bull.), Fr. 18th October, 1906.

Claudopus nidulans (Pers.), Pk. 18th October, 1906. This is Pleurotus nidulans, Pers.

Psilocybe fænisecii (Pers.), Fr. 13th July. 1905. Galera lateritia albicolor, Pk. 13th July, 1905. Geaster limbatus, Fr. (an earth-star). 18th October, 1906; Fuligo vata (Schaeff.) Mackr. 18th October, 1906.

NEW BRUNSWICK FLYCATCHERS.

BY WM. H. MOORE, SCOTCH LAKE, N.B.

We have many species of flycatching birds in this Maritime Province, but in this paper we will deal only with the members of the family Tyrannidæ that occur here. Should we have the specimens in hand, we find that the bill is broad and depressed at the base, and about it grows a number of bristly feathers which serve to assist in capturing insects, and to restrain the struggles of captives. The number of primaries are ten, the first of which is long. There are twelve rectrices, or tail feathers, and the hind claw will be found not smaller than the middle claw.

With some field practice one is enabled to recognize flycatchers from their habit of sitting upon some prominent perch as they await the passing of some insect that they desire to add to their bill of fare, then rapidly darting forth to seize the prey

and often returning to the same perch.

Our flycatchers are necessarily migratory as they depend almost wholly upon insects for a food supply, so that six months is about the limit of time each year, that they are with us. They are not endowed with the power of producing a musical song as are many of our other birds, but are quite as conspicuous through their unmusical calls of love or rage, as are many of our musical songsters through their powers of emitting more chordant sounds.

In nest building they exhibit various styles of architecture, and some species display considerable ingenuity in building nests to closely resemble surrounding objects. With the exception of a species recently added to our list, none of our flycatchers have brightly colored plumage. All are robed in inconspicuous grayish or dull colored plumage and the sexes much resemble each other.

Each species has its favorite habitat, thus they are distributed throughout the province in localities that suit each species. For this reason we find some species about orchards, others live about water-courses, and again there are those that live mostly in wooded tracts. One species of accidental occurrence has had its habits very little studied while in our land, and possibly another may not occur with us for years to come. The species referred to is the scissor-tailed flycatcher (Milvulus tyrannus) and is of accidental occurrence. May 21st, 1906, a bird of this species was secured at Clarendon Station, Queen's Co., N.B., by Mr. G. S. Lacev. This is the only record so far known of this species being taken in this province. It had evidently come north with the migration wave that passed here May 18-20. Then followed cold, wet days, and migration was again nearly at a standstill. Insect life was so cooled down May 21-22 by a fall in the temperature that a scarlet tanager was observed by the writer hopping about on plowed ground searching for food. Bird life suffered greatly in consequence of the fall in the temperature.

This scissor-tailed flycatcher when first observed was flying about alighting upon the ground and low perches, and was at first thought to be a shrike, but when alighting within a few yards of Mr. Lacey, its oddity was noticed, and procuring his gun he secured the rara avis. According to Mr. Lacey, this bird measured fourteen inches in length. The upper parts were gray or ashy, light underneath; wings and tail blackish; the tail deeply forked and about ten inches in length, the under side washed with a pinkish color as was the lining of wings. The scissortailed flycatcher is of decidedly greater length than any of our other flycatchers, but the body is no larger than that of the king-

bird.

THE KINGBIRD (Tyrannus tyrannus) is a resident of orchards during its breeding season. While migrating, its route seems to be along water-courses. A pair of these birds will vigorously drive other birds from their hunting grounds, and they display special hatred to crows and hawks, attacking them if they come near the home of the kingbird. They fly along above their enemies and swoop down at them, constantly uttering their shrill cry of rage. The large birds are thus escorted to some distance.

The kingbird arrives in central New Brunswick from the south about the middle of May. The thirteenth, fifteenth and eighteenth are dates of arrival for three years. They depart again about the first of September. Nest building begins in June, and from three to five eggs are laid in a nest built of coarse dried grass stems, intermixed with wool. The eggs and young are zealously guarded by the parent birds, who raise a great outcry if the nest is molested. The food of the kingbird consists largely of insects, especially injurious to the welfare of man. Some wild fruits are eaten, and but very little cultivated fruit or berries are ever touched.

THE CRESTED FLYCATCHER (Myiarchus crinitus) is of rare occurrence here. Some have been observed in August when on the southward migration, and at that time were frequenting the tops of dead trees that reached high above the surrounding forest. The top of a very tall dead hemilock tree was a favorite stand, and from this they would dash swiftly for a distance of fully one hundred yards to capture some insect. Since this tree was blown over, some half-dozen years ago, we have never seen the birds. This species is reported to pass the summer season near Woodstock, Carleton Co., N.B.

The Phoebe (Sayornis phoebe) is the earliest of the fly-catchers to arrive from the south, and is due to arrive from the middle of April until the first of May, according to the state of the weather, which regulates the supply of insects upon which they feed. I have never observed the phoebe here in summer, nor during the autumn migration. In spring their favorite resort is along water-courses bordered by low lands upon which grow elm trees. Among the elm tree-tops and near them they find many insects to their liking, after which they swiftly dart, snapping their bills as they capture the insects. Then returning to their place of observation, give vent to their feelings in utterance of discordant harsh calls somewhat resembling the name of the bird—phoebe. So closely do they follow the larger streams in this section that I have never observed them a mile from streams that are bordered by elm grown intervals.

THE OLIVE-SIDED FLYCATCHER (Contopus borealis) is distributed throughout the wooded tracts of the province. In no

section are they found in abundance, and with the exception of a family gathering, not more than a pair will be found together. They arrive in this section from the south about the middle of May. They apparently migrate at all hours. The first arrivals have been heard in early morning, during the middle of the day, and well along in the afternoon. When near at hand, the call or song of the male sounds like the three notes "Whew-take care," but at a distance of a hundred yards or more the first note is not auditle, and we hear only the two last syllables, "take-care." Many of the small birds and various species of insects could undoubtedly interpret the call of the olive-side as it sounds in the ear of the Anglo-Saxon, "take-care," for you are liable to be way-laid by a feathered tyrant who seems to know no fear.

The olive-side chooses some tall evergreen tree as a screen and foundation for its nest, which is composed of twigs and mosses and built well out on a limb. The usual number of eggs is four. The young are fledged and ready to begin the southward march by the first of August. The migration route of this species is along the larger streams, and by the tenth of August they have

gone from this section for a period of eight months.

The calls of the olive-sided flycatcher made such an impression upon the memory of the writer in his early days that nearly thirty years later when the bird was identified and its name learned, the calls would awaken childish reminiscences of earlier days when not more than a half dozen birds were known to the

people of an entire settlement.

THE WOOD PEWEE (Contopus virens) is a bird of the orchards and hardwood knolls. It is a bird smaller than any of the foregoing species, except the phoebe, which it closely resembles in size. The call or song of the pewee is characteristic of the species and is a series of modulated tones imitating the word "pewee". The pewee is due to arrive from the south the latter part of May, and stays with us about four months. During its stay the greater part of the time is taken up with family affairs. The nesting site is usually chosen upon some horizontal limb of a goodly sized tree, and at a height varying from a few feet to fully sixty feet. The nest is built of a downy substance inside, covered with lichens or mosses, to closely resemble natural growths upon the limbs and trunks of surrounding trees. The eggs, usually four in number, are beautifully marked, and carefully guarded by the parent birds.

THE YELLOW-BELLIED FLYCATCHER (Empidonax flavirentris) is tolerably common in southern parts of this province, but in the interior it is a rare species. It breeds throughout the sections where it is a summer resident. The writer has had no personal

experience with this species, so rare is it in this locality.

THE ALDER FLYCATCHER (Empidonax traillii alnorum) is tolerably common along alder bordered streams. It arrives from the south late in May when one is notified of its arrival by hearing its harsh call which, to some observers, sounds like the following notes, "kzer-wee," uttered persistently as the bird sits at rest upon some twig, when upon the lookout for its favorite insects. The nest of this species is a good imitation of a bunch of dried grasses lodged in the forks of a small bush by water during freshets. An observer unacquainted with the habits of our flycatchers, would never suspect that the nests of the wood pewee and alder flycatcher belonged to nearly related birds, vet both rests are good imitations of objects occurring in their vicinity, thus showing that the birds try to protect the eggs and young in a thoughtful manner.

THE LEAST FLYCATCHER (Empidonax minimus) is a babitant of orchards and second growth deciduous trees. With the exception of the pewee, the call and song of the least flycatcher is more pleasant to the ear than any of the other flycatchers' notes. A common name applied to this species is derived from its notes which sound "Chebeck, chebeck," and may be heard from the time the birds arrive from the south in May until after the young are fledged, in June. The eggs of the chebeck are quite unlike the eggs of our other flycatchers, being of a spotless cream color throughout. The number of eggs is three or four. The nest is compactly built of shreds of bark, weed stems and feathers, lined with plant down, and usually placed in the forks of a small tree, or among twigs of a horizontal branch of a conifer. Squirrels and blue jays are persistent enemies, robbing the nests of both eggs and young birds. This species seems to put more confidence in man than does any of its kin, therefore, it may often build its nest and rear its young in close proximity to our own buildings. In the construction of their nests they like to get bits of string that are often put out for the special benefit of the birds. The strings make good material for binding the nest together and to its foundation.

MEETINGS OF THE ENTOMOLOGICAL BRANCH.

Meeting No. 6 held at Mr. Baldwin's house, 21st March, 1907; present Messrs Fletcher, Harrington, Halkett, Young,

Gibson, Metcalfe, W. H. Baldwin and J. W. Baldwin.

Mr. Gibson showed an inflate of the larva of Sphinx eremitus which had been found feeding on Monarda, also one of Sphinx kalmiæ covered with the conspicuous white cocoons of an Apanteles. A specimen of the larva of Parorgyia clintonii, destroyed by an Apanteles the larvæ of which on emerging from their host spin a mass of silk like a tuft of cotton wool, and an inflate of a white grub were also shown.

Mr. Young exhibited a large case showing life-histories of Papaipema pupurifascia, Papaipema harrisii, var., Papaipema thalictri. Papaipema cataphracta, Parorgyia clintonii. Tinea granella, Peridroma occulta and Caripeta divisata. These were

much admired by those present.

Mr. Halkett showed two butterflies which he had collected in Europe in 1900, one Vanessa atalanta, at Paris, France, and

the other Parnassius apolla, taken in Switzerland.

Dr. Fletcher exhibited a case of dragon flies which had been determined by Dr. E. M. Walker, of Toronto. Among these were some interesting local species which had not previously been recorded from the Ottawa district. Gomphus adelphus taken at Hull, P. Q., new to Canada; Gomphus brevis: Basiaeschna janata and Helocordulia uhleri were the species of most interest. Dr. Fletcher also showed the 2nd Volume of Dr. Felt's new work on "Insects Affecting Park and Woodland Trees. This was much admired.

Mr. Metcalfe spoke of the parasite Psilomastix exesorius which he had reared from the chrysalis of Papilio asterias and showed specimens. An interesting discussion took place on

parasitic insects in general.

Mr. Harrington showed specimens of three species of Panorpa which he had taken at Ottawa. He also showed some sawflies and particularly drew attention to the wide range of some species. Some might be found right across the continent from New Brunswick to the Pacific Coast and up into Alaska. He stated that his own collection had been rearranged and that he would now be glad to assist any of the members who cared to take up this interesting branch of study. He advised that as many as possible of the larvæ should be collected in spring as in that way it was much easier to get good specimens than to carry the larvæ over the winter, many of the species being double brooded.

Mr. Baldwin exhibited his collection of lepidoptera and pointed out some of the rarer species which he had taken at Ottawa during the last year or two. Some of these were particularly interesting and the only records for the district.

J. W. B.

The 7th meeting of the Entomological Branch was held at the house of Mr. Halkett, on the evening of the 4th April, 1907. There were present, Dr. Fletcher, and Messrs. Harrington,

Gibson, Young, Baldwin, Metcalfe, Wilson, and Halkett.

Mr. Harrington exhibited two cases of hymenoptera, consisting of the Siricoidea and a portion of the Tenthredinoidea. The collection contained many interesting species from all parts of Canada, and also some from the United States. Some of the species were stated to be apparently undescribed, and types of several species described by Provancher were included. Attention was directed to some of the more injurious forms, and to the fact that the insects in this division of the hymenoptera were of special interest, as the larvæ were phytophagic, and often so abundant as to cause great devastation. Mr. Harrington also presented a list of forty species of spiders which had been recently determined by Mr. Nathan Banks, and stated that about a dozen were additions to the Ottawa list of Arachnida.

Mr. Wilson made mention of the destruction caused in Northern Ontario by the larvæ of the Larch Sawfly, *Nematus Erichsonii*, chiefly eastward of Nipigon, and referred to petrified wings of sawflies found by him in slabs of slate in New Brunswick.

Mr. Gibson exhibited a magnificent pair of the Imperial Moth, Eacles imperialis, Dru., male and female, which had been presented to the Division of Entomology by Mr. T. W. Ramm, of Ross Mount, Ont. The species, although rare in Canada, has been taken at Ottawa (once), Port Hope, Toronto, and one or two other localities in Ontario. Specimens of Lepisesia ulalume, Strck., from Vancouver, B.C. (A. H. Bush), and co-types of Recurvaria gibsonella and Recurvaria coniferella were also shown. These two latter are new local species reared by the exhibitor, and described by Mr. W. D. Kearfott, of Montclair, N. I.

Mr. Young showed a box of microlepidoptera, which had just been named for him by Mr. Kearfott. Among these were 10 new Ottawa species, the descriptions of which have just appeared. The names Enarmonia youngana, Enarmonia fletcherana and Carposina oltawana were of particular interest to those present. Regarding the collection of these small moths, Mr. Gibson spoke of a trap which had been devised by Mr. J. D.

Evans, of Trenton, Ont., and explained how it was made. Mr.

Evans has been very successful with it.

Dr. Fletcher showed specimens of two species of neuropteroid insects found in winter on the surface of snow, apparently Boreus californicus, Pack., and Boreus unicolor, Hine. They were collected by Mr. J. W. Cockle, at Kaslo, B.C., during the past winter. An ichneumon parasite and the pupa of Grapta interrogationis, and a beautiful pair of the British Columbia Thecla dumetorum, Bdv., the under side of which, like that of its close ally T. rubi, of Europe, is bright green, a colour seldom seen among butterflies, were also exhibited, as well as specimens of Leptarctia californica, Wlk., and Brephos infans, Mœschl., which superficially resembled each other very much, but are in no way related to each other. Dr. Fletcher also spoke further on insect traps, and urged the members to begin at once to lay their plans and get apparatus in order for the coming season.

A. H.

LEUCOBREPHOS MIDDENDORFI, MEN.

Three beautiful specimens of this very rare moth were recently received from the Mayo River, Yukon Territory, by Mr. Joseph Keele, of the Geological Survey Department. These were collected by Mr. J. A. Davidson, of Duncan Creek, Y.T., on April 16th, 1907. This moth is extremely rare in collections and these specimens are important as showing the wide distribution of the insect. The specimens were of an unusually dark form, but are similar to one specimen reared by me from eggs received from Mr. Norman Criddle, of Aweme, Manitoba. specimen was one of about a dozen from the same batch of eggs, the remainder of which were of the normal gray form. I have also two specimens of the dark form which were brought back from Labrador in 1894, and were taken by Mr. A. P. Low during his exploration of that country. They were collected on the portage at Grand Falls, Hamilton River, Labrador, on May 12th, 1894. Although so exceedingly rare in collections, the insect appears to be of very wide distribution, and, as it is also very difficult to capture and appears very early in the year, it is possible that it may have been overlooked in intervening districts. It would be well for collectors to be on the alert to capture any specimens of a black and white very active moth which they may see early in the year in northern regions.

J. FLETCHER.

SUB-EXCURSIONS.

Old Beaver Meadow, did you say? Follow the old road past the old toll-gate and you'll come to it. You must be mistaken,-for the meadow where the Field Naturalists gathered on the 18th of May, 1907, could never be called old. Such a charmingly fresh and beautiful spot! Nature in all the suggestiveness of youth! The delicate traceries of the branches of elm and maple were half concealed, half set forth, by a wonderful indescribable adornment of fluffy tufts and tiny tendrils and wee curled buds. Leaves, did you call them? Such an ordinary name! Nature has nothing so ordinary! And, Oh! the colors of everything! That delicate vellow green and the cool silvergrev. and those browns-golden brown, brown and reddish brown! How the colors of Spring haunt the mind of the artist. as with futile attempt he mingles the tints of his paint box, trying with the seductive wiles of combination to catch just that tone! How it pursues him in his dreams--just that tone!

But imagination would wander as the Field Naturalists wandered that afternoon, and would that the results of its meanderings might be as satisfying. Through the cedar woods they went, some here, some there; some to find happiness in the gentle hepatica, fair trillium and aromatic ginger root, and treasures of tree and shrub, others in the birds, the many colored warblers and sweet-voiced sparrows, others again absorbed in the little creatures that creep or fly, some indeed that both creep and fly, and yet again, a group who find the greatest charms in a hard, grey substance which sometimes yields its secrets reluctantly, but those secrets possess the charm of the classics in that, though dead, they live forever.

As for us, and there were many like us, we enjoyed something of it all. "Gleam and gloom, and woodland bloom, and breezy breaths of all perfume!" An overturned rock showed groups of tiny ants, brown and black, like moving beads. Ever and anon the clear, sweet note of the white-throated sparrow came to us. Then, through a barbed-wire fence to a cutting of lime-stone rock. What an interesting old-time world, Mr. Wilson points out to us! Shells and crinoids and coral, all preserved, as Mother Nature knows how, between the leaves of her hard, grey book. Such an alluring story for those who will trouble to read!

Then back through the woods! Now some one finds a "good old snail with an English name." Then a flash of color calls to our eyes,—it is a warbler! There is another! But what a beauty! Such a brilliant orange throat and yellow head and

black and white striped wings. We must ask its name! Then following our leader—he pretends to know and takes the wrong road for variety—we gather at the rendezvous.

It is a beautiful spot, a little green dale with hills rising gently around it,—hills covered with many trees of lightsome garments and here and there a sombre pine. At our feet is a hearty little stream, and you can trace its course by the brownleaved bushes coaxed to its side. In and out of these bushes flashes the black-throated blue warbler, and from all sides come the songs of the birds. It is their even-song. Up behind the hills, great, soft, white and grey and golden clouds are gathering, and the light and shade fall on the fields before us. We see it all and hear it almost unconsciously, for our leaders now are telling each the results of his afternoon's search. They are wonderfully modest, these leaders. They never make us feel the amount of their knowledge and the littleness of ours, but ever strive to interest and cheer us on to know more and to love better.

Mr. Macoun speaks of the birds that have charmed us with color and flight and song, and our unspoken questions are answered. It is because of the shelter of the meadow that so many birds have gathered here this afternoon. Warblers in unusual variety and sparrows and black-birds! It is not on the beauty of these little creatures that the speaker dwells, it is on their usefulness. How dependent we are on them! For should these little creatures cease to be, what is to save our crops from utter blight of insect life grown strong through absence of its old-time foe! There is so much practical value in our study of Nature.

And now it is Mr. Clarke's turn. And ashe speaks of tree and flower and bush, a beauty comes to them,—a beauty quite apart from form and color. How, on the wooded hillside grow the hepatica, bellwort, adder's tongue, barren strawberry, columbine, trillium, mitrewort, squirrel corn and wild ginger. And down in the low grounds along the stream, the violets in profusion make their home, and the marsh-marigolds and sweet gale and meadow rue and Spiraea salicifolia fringing the stream in great numbers, but not in bloom. And on the dry, thin soil the white cedar, red cedar and juniper find the land of their choice. It is a charming talk and impossible of reproduction by the unlearned.

Mr. Halkett speaks of various zoological objects collected during the afternoon. Of mollusks, there were species of land snails (Helicoids), a specimen of a fresh-water snail (*Planorbis*), and a shell of a bivalve-mollusk (*Sphærium*), the last mentioned

of which was found by Mr. Lemieux. Also winged ants are shown which were found with the rest of the colony under a stone; and three specimens of a salamander (*Spelerpes bilineatus*) found by Mr. Lemieux, under a stone beside a brook.

These specimens are produced one after another from interesting looking paper bags ranged side by side on a stump. There is something that raises one's hopes about those paper bags! And now, expectation, fed on snails and ants and salamanders, is watching with large eyes for the next bag. This bag has been handed to the speaker by Mr. Gibson. It is opened, and out is lifted a squirming, resisting, black and white object,—a conspicuously colored milk snake (Coronella doliata). This snake, it is pointed out, is very similarly marked to one collected near the Rifle Range last year, and which was mentioned in the zoological report as probably being a specimen of a southern variety of the milk snake.

There were yet other things found this afternoon. From Mr. Gibson we found that the backward spring had been a little too much for our entomological friends, and they had been keeping indoors much longer than was their custom. A single specimen of the native white butterfly was seen, also a few geometrid moths flying in open places. Under flat stones, the most interesting objects secured were some specimens of a very large spider, which as yet has not been determined. Hibernating larvæ of Noctua clandestina, Leucania commoides and Isia isabella were found, too, as well as specimens of several kinds of ground beetles.

We had the pleasure of having with us, accompanying Mr. Gibson, an Honorary Member of the Club, the Rev. G. W. Taylor, a distinguished entomologist from Wellington, B.C.

And now it is over. The soft mists of early afternoon which had gathered into great clouds, now sprinkle a few drops just to show what they might have done. But the homeward-bound are on the quaint old road, by its rows of elms and poplars, and it matters not. It is just an opportunity for Nature to show one more beauty,—her own special color scheme,—for the green of woods and fields, the blue of sky and water, the gold and pink of sunset, and grey and mauve of everything, are gathered in one radiant, soft-tinted arch across our path—a rainbow.

NOTE ON THE EUROPEAN CARP.

To the Editor of THE OTTAWA NATURALIST:-

The species of fish, which you kindly drew my attention to at Lapointe's, the fish-dealer's, two large specimens of which were purchased for the museum, is the European carp (Cyprinus carpio). The specimens are from Lake Ontario, and were transported from Toronto to Ottawa. They weigh some 22 pounds each, being within 1 pound of each other; and measure respectively: (1) 2 ft. 9 ins. long; 9 ins. deep; 1 ft. 10 ins. girth; (2) 2 ft. 8 ins. long; 10 ins. deep; 2 ft. girth. A number of much smaller specimens were also seen at the same time in the market. Another specimen of this species in the Fisheries Museum, from the Bay of Quinte, near Belleville, Ont., is mentioned in the Zoological Report of the Club; and Mr. Hurley, Fishery Officer, states that the carps are infesting the Bay of Quinte in thousands. When fresh the two specimens from the market manifested high coloration: they were a vivid golden colour, and the paired fins, opercular covers, and other parts were bright reddish. a feature which Prof. Prince considers, probably, due to seasonal characters, owing to the approach of the spawning time. The structure of the carp is to be found treated of in various ichthyological works, and, therefore, need not be entered into here; and a very full account of how injudicious it has been to introduce the German carp into our waters will be found in an article entitled: "The Place of Carp in Fish-culture" (Supplement No. 1 to the 29th Annual Report of the Department of Marine and Fisheries, Fisheries Branch, 1896), by Prof. E. E. Prince. Commissioner of Fisheries.

ANDREW HALKETT.

Ottawa, 22nd April, 1907.

INJURY TO NESTS BY MUSKRATS.

During the past week we have found three nests of the Virginia rail and one nest of the American bittern, with the eggs all smashed. As these nests were all located in marshes in remote parts of the country, I have placed this destruction to the credit of the muskrats, which are quite common in the district.

I shall be very glad to have the views of some of our ornithological friends on this subject, and to know if my conclusions are correct.

W. J. Brown.

Westmount, Que., June 3rd, 1907.

REVIEW

THE TREE BOOK, A POPULAR GUIDE TO A KNOWLEDGE OF THE TREES OF NORTH AMERICA AND THEIR USES AND CULTIVATION. By Julia Ellen Rogers, with sixteen plates in color and one hundred and sixty in black and-white from photographs by A. Radelyffe Dugmore. Doubleday, Page & Co., New York, pp. 589, \$3.00.

Ranging from Dr. Sargent's monumental work to hastily prepared books to supply the demand for Nature Study literature so much has been printed about trees during recent years that where a single book is to be purchased it is difficult to decide upon the one to buy. If the purely technical works be excluded it may be safely said that none approaches "The Tree Book" for general use. Profusely illustrated, printed on paper of the best quality and full of useful information, popular and scientific descriptions have been combined in such a manner that one familiar with all our trees will find almost as much in it that is new and interesting as will the school-boy who is beginning the study of trees. The first four hundred and fifty large quarto pages deal with "How to Know the Trees" Beginning with the pines and ending with the irburnums and elders, every family being prefaced by a key to the genera, each species is described, and following its description is a mass of information which includes a detailed account of all the known uses to which any part of the tree is put. Part II deals with "Forestry", Part III with "The Uses of Wood", and Part IV with "The Life of the Trees". An exhaustive index completes a volume which everyone, even remotely interested in forest trees, should own and study.

The delay in publishing this number of The Naturalist is due to the illness and absence from Ottawa of The Editor.

James Hope & Sons Booksellers, Stationers Sparks St. Ottawa

I.G.BUTTERWORTH& Co.

ALL-RAIL SCRANTON COAL HAS NO EQUAL

86 SPARKS STREET, OTTAWA

THE C. C. RAY CO. Ltd.

TOWRST PRICE

58 SPARKS ST. Phone 461

THE TORONTO GENERAL TRUSTS CORPORATION

Administers the estates of deceased persons who have left no will, at such rate of Commission as the Court allows, or as may be agreed upon

with the interested parties.

No bonds required, as in the case of private administration. No unnecessary expense. Family solicitor retained.

JAMES DAVEY, Manager OTTAWA BRANCH:

Cor. SPARKS and ELGIN STS.

BLYTH & WATT

Sparks

4

Specialists in ARTISTIC HARDWARE KITCHEN FURNISHINGS

Bank & Somerset Streets

American Entomological Co.

DEALERS IN

Insects and Entomological Supplies

The only makers of the genuine Schmitt Insect Boxes. Manufacturers of Cabinets and Cases for Insect Collections, and of the

American Entomological Company Insect Pins

Supply List No. 7 and List of Entomological Publications for sale justout. Write for it. Insect List No. 8 still in force

GEORGE FRANCK, Manager 55 Stuyvesant Av., BROOKLYN, N.Y.

Publisher of Views of Ottawa Phone

Books on Nature Study 962

C. H. THORBURN

Books & Stationery 80 SPARKS STREET, OTTAWA

R. McGIFFIN MEN'S FURNISHINGS

106 Sparks Street 24 Rideau Street

OTTAWA

STEWA

High Class Grocer

273, 275 BANK STREET PHONE 1250

The World's Best Typewriter

E. R. McNEILL, Agent 35 QUEEN ST.,

HENRY J. SIMS & Co.

Fine Hatters

110-112 SPARKS ST. - OTTAWA.

MASSON'S



SHOES

72 Sparks Street,

That Eye Strain can be relieved by glasses. MUSGROVE'S DISPENSARY by graduate optician 212 BANK STREET

INSPECT

田

CREA

The Ottawa field=Haturalists' Club, 1907=1908

Datron:

THE RIGHT HONOURABLE EARL GREY, GOVERNOR GENERAL OF CANADA.

President:

W. J. Wilson, Ph.B.

Vice=Presidents:

A. E. Attwood, M.A. A. Halkett.

Librarian: I. W. Baldwin.

Secretary: T. E. Clarke, B.A. (470 O'Connor Street).

Mr. J. M. Macoun Rev. G. Eifrig. Mr. H. H. Pitts. Mr. E. E. Lemieux.

Treasurer: Arthur Gibson, (Central Experimental Farm).

Committee: Mr. A. H. Gallup. Miss I. Ritchie. Miss A. L. Matthews. Miss Q. Jackson.

Auditors: R. B. Whyte. F. T. Shutt.

Standing Committees of Council: Publishing: A. Gibson, J. M. Macoun, H. H. Pitts, G. Eifrig, J. W. Baldwin, Miss I. Ritchie.

Excursions: A. Halkett, A. Gibson, G. Eifrig, E. E. Lemieux, T. E. Clarke, Miss A. L. Matthews, Miss Q. Jackson.

Soirées: A. E. Attwood, H. H. Pitts, J. M. Macoun, A. H. Gallup, E. E. Lemieux, Miss A. L. Matthews.

Leaders:

Geology: H. M. Ami, W. J. Wilson, D. B. Dowling, W. H. Collins, M. F. Botany: John Macoun, J. Fletcher, D. A. Campbell, A. E. Attwood, S. B. Sinclair, T. E. Clarke.

Entomology: W. H. Harrington, J. Fletcher, A. Gibson, C. H. Young, J. W.

Conchology: J. F. Whiteaves, F. R. Latchford, J. Fletcher, S. E. O'Brien Ornithology: G. Eifrig, W. T. Macoun, A. G. Kingston, A. H. Gallup, H. F.

Zoology: E. E. Prince, A. Halkett, W. S. Odell, E. E. Lemieux. Archæology: T. W. E. Sowter, J. Ballantyne. Meteorology: Otto Klotz, John Macoun, A. E. Attwood, D. A. Campbell. THE OTTAWA NATURALIST

Editor:

JAMES M. MACOUN, (Geological Survey of Canada).

Associate Editors:

DR. H. M. Ami, Geological Survey of Canada.—Department of Geology. Dr. J. F. Whiteaves, Geological Survey of Canada.—Dept. of Palæon-

DR. A. E. BARLOW, Geological Survey of Canada.—Dept. of Petrography. DR. Jas. Fletcher, Central Experimental Farm.—Botany & Nature Study. Hon. F. R. Latchford.—Department of Conchology.

MR. W. H. HARRINGTON, Post Office Department.—Dept. of Entomology. Rev. G. Eifrig, 210 Wilbrod St.—Dept. of Ornithology. PROF. E. E. PRINCE, Com. of Fisheries for Canada.—Dept. of Zoology. Dr. Otto Klotz—Dept. of Meteorology.

Membership Fee to O.F.N.C., with "Ottawa Naturalist," \$1.00 per annum