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THE

OTTAWA NATURALIST

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THE OTTAWA NATURALIST

VOL. XXIV.

OTTAWA, APRIL, 1910

No. 1

OUR MEMBERSHIP.

Another milestone has been passed in the history of the Ottawa Field-Naturalists' Club. Since the Club was organized in 1879, the membership has grown from 94 to 320. The Club is unique in many ways. The work it accomplishes through its excursions in the field, lectures and branch meetings during the winter, and the publishing regularly of The Ottawa Naturalist each month, is truly remarkable, and indicates the varied interests and wide scope of its activities. This work has proved and is proving itself most helpful and inspiring to its members.

There is probably no other natural history society in America which does more work than the Ottawa Field-Naturalists' Club. There is, however, still much to do. Instead of having a membership of 320, we should at least have double this number interested in our work in the city of Ottawa alone. The new Council of the Club is a particularly strong one and every member will do his or her utmost to make the year a success. The members themselves, it is hoped, will assist the Council in making known more widely the workings and nature of the Club.

A larger membership means better returns in every way. Particularly would it mean a better Ottawa Naturalist. In these days of high living, the cost of printing has gone up in company with almost everything else, and it is really beginning to be quite a serious matter to keep up the size of the Naturalist with the present revenue. If additional funds were available more illustrations could be used and of course many more articles.

It is to be hoped that the year of 1910-1911 will be a record one. The work of the society should appeal to almost everyone, and if our present members would only induce their friends to join, the Council would be much encouraged and the Club very much strengthened.

REPORT OF THE COUNCIL OF THE OTTAWA FIELD-NATURALISTS' CLUB FOR THE YEAR ENDING MARCH 15th, 1910.

In accordance with proposed amendments to the Constitution of the Club, the following report is largely a compilation of reports submitted by the various branches of the Club and the Standing Committees of Council.

MEMBERSHIP.

During the year 28 new members have been elected, making the present membership 320, composed of 312 ordinary members and 8 corresponding members.

PUBLICATIONS COMMITTEE.

In accordance with the recommendation of the Council, action has been taken by the Publications Committee toward devising some practicable scheme whereby the publications received by the Club might be of greater service not only to our members, but to the public as a whole. As a result, arrangements have been made with the Librarian of the Carnegie Library whereby practically all regular periodicals received in exchange are now placed on file in the reading room of the Library and subsequently laid away to be used as directed by the Club.

The following is a list of the publications which are now being received by the Carnegie Library on behalf of the Club:—

- 1. The Nature Study Review.
- 2. The Auk.
- 3. The Canadian Entomologist.
- 4. Journal of the New York Entomological Society.
- The Journal of Geography,
 Le Naturaliste Canadien.
- 7. Journal of the Elisha Mitchell Scientific Society.
- 8. Transactions of the Botanical Society of Edinburgh,
- 9. Publications of the Field Museum of Natural History,
- 10. The Ohio Naturalist.
- 11. Torreva.
- 12. The Wilson Bulletin of Ornithology,
- 13. The University of California Chronicle.
- 14. Queen's Quarterly,
- 15. Bulletin of the New York Botanical Garden,
- i6. Bulletin of the American Museum of Natural History,

- 17. Proceedings of the Boston Society of Natural History,
- 18. Transactions of the Wisconsin Academy of Sciences,
- 19. Proceedings of the Indiana Academy of Science,
- 20. Missouri Botanical Garden Annual Reports,
- 21. Proceedings of the Hamilton Scientific Association.

In addition to this list of periodicals, a considerable number of miscellaneous publications are received during the year. Some of these are of much interest and value, but, as a rule, they constitute reports of proceedings of meetings, catalogues of birds and mammals, annual reports of societies, etc., and are available elsewhere. There is on hand at present an accumulation of a number of years representing some six or seven hundred pamphlets, etc. These are practically all in the basement of the Normal School and have been carefully examined and sorted. The Committee suggest that these publications be made available for free distribution to members of the Club on a certain date and that due notice of this offer be made in the Ottawa NATURALIST. It is suggested further that after two weeks have expired from the date on which this offer opens that the remaining publications be placed in a convenient place in the Normal School and made available to the students and to the general

The Librarian of the Club reports that approximately one dozen complete sets of the NATURALIST are now on hand, none having been sold during the year. Several single copies of back issues and of the Fletcher Memorial number have been disposed of

Owing to the renovation of the Carnegie Library, the Club's books are now in the basement but will be placed in a special section of the stack room in a short time. The Committee recommend to the new Publications Committee that all publications of the Club be properly stamped, and that a select list of the bound copies be placed on file in the reference library of the reading room, providing this meet the approval of the Librarian.

THE OTTAWA NATURALIST.

Volume XXIII of The Ottawa Naturalist, the official organ of the Club, has been published monthly under the editorship of Mr. Arthur Gibson. It contains 230 pages and three full-page plates.

The following are among the papers that appear in this volume:—

On Geology-

1. "A Canadian Stepheoceras," J. F. Whiteaves.

2. "The Ornamentation of Periglyptocrinus priscus," Wm. A. Parks.

On Botany-

- 1. "Canadian Species of Thalictrum," Edward L. Greene.
- 2. "Certain Biological Principles and their Practical Application in the Improvement of the Field Crops of Canada," L. H. Newman.
- 3. "New Contributions to Canadian Bryology," N. C. Kindberg.
- 4. "Contributions from the Herbarium of the Geological
- Survey," James M. Macoun.
 5. "German Field Methods of Botanical Excursions," John Craig.
- 6. "Some of the Best Native Plants for Cultivation." W. T. Macoun.

On Ornithology-

- "Winter Birds at Point Pelee." W. E. Saunders.
- "Bird Notes from Northern Ontario," Rev. C. G. Eifrig.
- "Birds of Stony Plain, Alberta," S. S. Stansell.
- "Everyday Ornithology," Norman Criddle.
 "The Passenger Pigeon," W. Lochhead.

On Entomology-

- "Discourses upon the Lepidoptera," F. H. Wolley-Dod.
- "Snow Worms," Arthur Gibson.
- "Tent Building Habits of Ants," C. Gordon Hewitt.

On Zoology-

- 1. "The Prong-horn Antelope," E. E. Prince.
- 2. "A Rare Weasel at Ottawa," W. E. Saunders.
- 3. "A Shrew new to New Brunswick," W. H. Moore.

On Archaology-

1. "Algonkin and Huron Occupation of the Ottawa Valley," T. W. E. Sowter.

EXCURSIONS COMMITTEE.

The programme of spring excursions was as follows:-April 24th-Experimental Farm.

May 1st-Beechwood.

May 8th-Blueberry Point.

May 15th-Britannia.

May 22nd-Beaver Meadow, Hull,

May 29th—Carp (General Excursion).
June 5th—Chelsea (General Excursion).
June 12th—Beaver Meadow.
June 19th—Stittsville (General Excursion).

Some of these excursions were cancelled because of unfavorable weather; reports of those which were held appeared in the June and the July numbers of The Ottawa Naturalist, most of the reports having been prepared by Rev. C. G. Eifrig, Chairman of the Committee.

The programme for the fall months was:— September 18th—Mckay's Lake and outlet. September 25th—Experimental Farm. October 2nd—Blueberry Point.

The planning of an excursion programme is becoming more and more difficult from year to year. The rapid extension of the city and the development of suburban resorts are greatly restricting such valuable collecting grounds as Rockcliffe, Dow's Swamp, Blueberry Point and Britannia.

The Council, desiring to extend the sphere of the Club's work, proposed to establish branches in some of the centres near Ottawa, such as Carp and Stittsville. It was thought that valuable field work could be done by members of such branches. the results of which would appear in The Ottawa Naturalist. It was thought also that leaders from the parent Club might occasionally direct local excursions, and that a joint field day could be arranged for at least once a year. An attempt was made to establish such a branch at Carp. Two members of the Council, Mr. J. W. Gibson and the Secretary addressed a public meeting at Carp on May 28th, outlining the proposed plan. A local committee was then elected for the purpose of organizing a branch. On the following day the Club held an excursion to Carp, and gave a demonstration of its methods of field work. Although there was a large local attendance and much interest was manifested, no organization has followed this experiment. Under the circumstances the Council deemed it unwise to attempt similar work in other localities.

Soirees Committee.

A comparison of the programmes for the season 1908-9 and 1909-10 shows the varied character of the addresses, lectures, and exhibition of specimens given under the auspices of the Club. The Club has now contributed three lectures to the joint course which has proved to be a success. During the season which expires to-night, six of the meetings were held in the

Assembly Hall of the Norman School and three, including this or the annual meeting, in the hall of the Carnegie Library. The first lecture for 1909-10 entitled "Home Birds and Wanderers," was given by Mr.W. E. Saunders, of London, Ont., and was illustrated with prepared birds' skins. The opening meeting, which followed this lecture a few evenings later, took the nature of a conversazione at which short addresses were delivered by a few members of the Club, besides which there was an exhibition of zoological, and botanical specimens, including some minute forms shown under the lens of the microscope, and an account of this meeting has already appeared in a recent issue of The Ottawa Naturalist. We were next favoured with an address by our President entitled "Instinct and Education," in which was presented a great deal to stimulate our thinking faculties; and following this was an admirable lecture given by Mr. A. H. W. Cleave, F.R.M.S., entitled "Life," which was illustrated with a series of beautiful lantern slides. A very instructive lecture entitled "The Flora and Fauna of the West Coast of Vancouver Island," was delivered by Professor John Macoun and was illustrated with a great variety of interesting specimens. For the first time under the auspices of the Club, Dr. C. Gordon Hewitt and Mr. H. T. Gussow. F.R.M.S., each contributed a lecture: the former on "House Flies and their Relation to Public Health," and the latter on "A Plant Doctor and His Work." A series of slides at each of these lectures was shown upon the screen. The Club's lecture for the joint course entitled "Bacteria in Relation to Plant Life" was given by Professor F. C. Harrison, of the Macdonald College, and this lecture also was fully illustrated with slides. Altogether the Club is to be congratulated in that such an able body of specialists was secured, and we owe to them a debt of gratitude for the selection of their subjects, all of which proved to be

THE FLETCHER MEMORIAL COMMITTEE.

This Committee has met many times during the Club year which closes to-night.

As has already been mentioned in the pages of The Ottawa Naturalist, there has been a very warm response to the appeal of the Committee for subscriptions, from members of the Club and friends of the late Dr. Fletcher. On the evening of November 9th last, the Committee reported that by far the larger number of subscribers had favoured the suggestion that the memorial take the form of a drinking fountain to be erected at the Central Experimental Farm. It was then therefore moved by Mr. F. T.

Shutt and seconded by Dr. Wm. Saunders and unanimously carried, "That the tribute about to be made to the memory of the late Dr. Fletcher, take the form of a drinking fountain, consisting of a granite shaft, with bronze medallion, inscription, etc., to be erected at the Experimental Farm, Ottawa, and that the Committee is hereby empowered to make all necessary arrangements for carrying out the work."

At a meeting of the Committee held on February 7th, it was decided to place this work in the hands of Dr. R.Tait McKenzie, of the University of Pennsylvania, Philadelphia. Dr. McKenzie has an enviable reputation, more particularly in mural bronzes and plaques, in the salons of Paris and London, and his work was highly commended to the Committee. On the 10th instant Dr. McKenzie came to Ottawa to meet the Committee, bringing with him plans and specifications of the proposed memorial, as well as a small model in plaster. The Committee considered these very carefully and suggested some changes, which, if made, it was thought would improve the appearance of the memorial. Further plans, drawings and photographs of the work will be submitted to the Committee from time to time as they are ready. It is hoped that the memorial will be finally completed and ready for unveiling towards the latter end of May, or early in June.

The following is a statement of the amounts subscribed to the Fletcher Memorial Fund:—

| Total amount subscribed | \$ 661.50 307.50 38.00 |
|---|--|
| Total amount subscribed by members of O.F.N.C Subscribed by friends, not members of Club, in Ottawa Subscribed by friends, not members of Club, in Canada outside of Ottawa Subscribed by friends, not members, in United States, etc | \$1,007.00 213.35 397.50 190.00 |
| | \$1,807.85 |

REPORTS OF BRANCHES.

THE GEOLOGICAL BRANCH.

The Geological Branch have not much to report except the ordinary work done at the excursions. Members of this branch attended the excursions and pointed out the interesting features to be seen in the localities visited. At Britannia a good illustra-

tion of conglomerate rock in the process of formation was noted in the gravel pits near the railway. Several fossils were collected at the quarries on the west side of Beaver Meadow near the contact of the Black River and Trenton limestones. The fossils showed that the quarries are situated in the Trenton. During the visit to Carp interesting specimens of curved apatite crystals were collected. These crystals were curved by a constant steady pressure, so that some of them are not even cracked. Others are broken on the convex side.

Marine shells were collected at nearly all the places visited; they were particularly abundant in the clays and gravels at Carp.

We feel that a special effort should be made to interest our young members in the study of geology, as no more healthy or useful work could be enjoyed by them.

THE BOTANICAL BRANCH.

While there were few botanical workers in the field during the past summer, the Botanical Branch continues to be one of the most active in the Club.

Apart from the help rendered at the excursions by the botanical leaders, most of the field work was done by two or three individuals. Mr. W. H. Harrington has added the names of two new species to the Ottawa flora, namely, Potentilla tridentata, found at King's Mountain, Que., and Minulus moschatus, obtained at Kingsmere, Que. Mr. H. U. Morris found the weed Eruca sativa at the Experimental Farm; this is a new record for the Ottawa district. Mr. H. Groh made a study of the local hawthorns (Cratægus) during the past year. He examined fifty trees in different localities and collected flowering specimens from each, and later in the season obtained the fruit. He found marked differences in the number of stamens and styles, the color of the anthers, and the number of flowers to a corymb on different trees. The specimens were sent to a specialist for identification, and the names of the species will be reported later.

Nine winter meetings of the Botanical Branch were held at the homes of the members, much interesting material having been presented. Six of these meetings have already been reported in The Ottawa Naturalist, and others, no doubt, will be. The following is the list of subjects presented at these meetings:—

1. "The Stems of Seed Plants," by Mr. D. A. Campbell.

2. "The Adaptation of Plants to their Environment as Shown by their Internal Structure," by Mr. J. W. Gibson.

"Reports of Field Work," presented at the home of Mr. R. B. Whyte.

4. "Some of the best Native Plants for Cultivation," by

Mr. W. T. Macoun.

5. "The Formation of Peat Bogs," by Mr. J. M. Macoun.

"The Trees of the Ottawa Valley," by Prof. John Macoun.

7. "The Value of Seeds as a Means of Identifying Plants,"

by Mr. G. Michaud.

- "The Correlation of Characters in Plants, and its Economic Importance to Plant Breeders," by Mr. L. H. Newman.
- "Some Herbaceous Perennials at the Experimental Farm," by Mr. W. T. Macoun.

THE ENTOMOLOGICAL BRANCH.

The Entomological Branch has had a fairly active year. Unfortunately, as yet, only one evening meeting has been held during the winter, but it is hoped to hold others before the spring work begins. During the summer of 1909, the local members of the Branch did considerable collecting, many interesting species being met with, some of which are new records for the district. Many insects too were collected in other districts far distant from Ottawa, by some of the local members. Mr. C. H. Young, while assisting Prof. Macoun, at Departure Bay and Ucluelet, B.C., found time to collect many species of interest. Mr. Andrew Halkett made a small collection in Nova Scotia, Mr. D. H. Nelles collected in the vicinity of Stewart River, Yukon Territory, and Mr. Arthur Gibson brought back many specimens from Prince Edward Island.

THE ZOOLOGICAL BRANCH.

The most interesting event of the year was the meeting at Winnipeg, Man., of the British Association for the Advancement of Science. Some members of the Branch attended the meeting and exchanged notes with eminent visiting zoologists. A section of the Association, conducted by Prof. Prince, visited the Biological Station at Departure Bay, the curator of this station being the Rev. Geo. W. Taylor, a member of this Club.

Mr. A. Halkett, after spending the summer months in Nova Scotia investigating the life-history of the lobster, *Homarus americanus*, visited New Westminster, B.C., where he had charge of an exhibit showing the hatching of the eggs of Pacific Salmonoids.

Prof. John Macoun, assisted by Mr. C. H. Young, made

extensive collections of fishes and invertebrates on the coast of Vancouver Island.

Mr. E. E. Lemieux reports the success of an experiment to introduce earthworms near the Upper Lievre lakes, where formerly anglers were unable to obtain bait. He also reports the abundance of the porcupine in the same district.

Mr. E. Le Sueur now has what is perhaps the finest private collection of turtles on the continent, including as it does, many Canadian species and a number of exotic forms.

Mr. W. E. Saunders contributes an interesting record in the capture of a diminutive specimen of Bonaparte stoat (*Putorius cigonani*) near Ottawa.

CONSTITUTION OF CLUB.

Early in the year the Council appointed a committee composed of the President and Messrs. Kingston, Newman, and Shutt, to prepare a revised constitution. The committee has prepared a carefully detailed constitution, which has been discussed at great length in the Council, and which will be submitted to the Club.

The President, Mr. A. E. Attwood, M.A., represented the Club at the May meeting of the Royal Society of Canada.

The Treasurer's report shows a balance on hand of \$31.85, the smallness of the balance being due to the slow payment of membership fees.

The thanks of the Club are due to Principal White for the use of the Normal School Assembly Hall, to the Library Board of the City Council, and to the Librarian, Mr. Burpee, for the use of the Lecture Hall of the Carnegie Library, to the Ottawa Electric Company for assisting in making the microscope demonstrations a success, and to the Press of the city for its co-operation in furthering the work of the Club.

All of which is respectfully submitted.

T. E. CLARKE, Secretary.

Subscriptions for the New Club Year are now due, and should be paid to Mr. Herbert Groh, Experimental Farm, Ottawa.

It is to be hoped that members will carefully examine the advertisements in this volume of The Ottawa Naturalist, and make a point of dealing with those firms who thus help the Club.

TREASURER'S STATEMENT FOR YEAR ENDING 15TH MARCH, 1910.

RECEIPTS.

| Balance from previous year | \$ 58.64 | |
|-------------------------------------|-----------|---|
| Subscriptions:— Arrears | \$.81.00 | |
| 1909-1910 | 224.00 | |
| 1910-1911, in advance | 31.00 | |
| | 336.00 | , |
| Advertisements in Ottawa Naturalist | | |
| OTTAWA NATURALISTS sold | 3.25 | |
| Authors' extras sold | 26.26 | |
| Maps of Ottawa sold | 10 | , |
| Government Grant | 200.00 |) |
| | \$753.55 | |

EXPENDITURE.

| Printing Ottawa Naturalist, Vol. XXIII, 12 Nos., 232 pp., including cover. Illustrations. Authors' extras. Miscellaneous printing: circulars, mailing envelopes, post cards, etc. | \$460.13 15.60 48.60 40.68 | |
|--|-------------------------------------|---|
| Postage on Ottawa Naturalist | 565.01 36.51 50.00 | |
| Less 2 per cent. for cash on some accounts of printer | 651.52 1.89 | 649.63 |
| Honorarium, Librarian. Soiree Expenses. Loss on General Excursion to Carp in May. Sundry expenses, postage, etc. Balance. | | 10.00 31.52 16.60 13.95 31.85 |
| | | \$753.55 |

ARTHUR GIBSON, Treasurer,

Examined and found correct,

R. B. WHYTE, J. BALLANTYNE, Auditors.

STOMACH CONTENTS OF SOME CANADIAN BIRDS.

BY C. W. G. EIFRIG, ADDISON, ILL.

The appended list gives the stomach contents of a small number of birds, the stomachs of which I have examined. In most of the stomachs of small birds, like finches, vireos, and warblers, the investigator who has not unlimited time at his disposal can usually only tell whether the contents is of vegetable or animal origin; in the latter case it takes expert knowledge of the microscopic parts of small insects to unable one to tell what insects have been eaten. The following birds have been selected either for their rarity or because they are well known. The majority have been taken near Ottawa, the others at least in Canada. Several in the list have been bought in the market. The contents of the stomachs of the birds near the end of the list, of which the percentage of the different parts is stated, have been kindly determined for the writer by the Bureau of Biological Survey, Washington, D.C., under the direction of Dr. A. K. Fisher, to whom the writer would extend his sincere thanks.

Holbæll's Grebe, Colymbus holbællii; October 17, 1905, a large bunch of its own feathers.

HORNED GREBE, C. auritus; October 10, 1905, a bunch of its own feathers.

Loon, Gavia imber; May, 20, 1907, bones of fish, including at least one of the Catostomidæ (the Suckers). Some of the gravel stones, also found, are at least half an inch long.

BITTERN, Betaurus lentiginosus; 1. May 12, 1904, several large beetles and other insects; 2. ?, 1905, 1 frog, 2 mice, 8 leeches; 3. October 30, 1906, 2 frogs, 2 small sunfish.

BLUE HEROX, Ardea herodias; July 25, 1905, 1 fish, six inches long.

Spruce Grouse, Canachites canadensis; October 31, 1904, pair, male and female, both full of spruce tips.

RUFFLED GROUSE, Bonasa umbellus togata; 1. September 30, 1904, clover leaves; 2. October 22, 1904, leaves, gravel and sand; 3. October 15, 1904, hawthorn (Cratægus) leaves; 4. April 25, 1905, leaves of Goldthread (Captis trijolia), and sharpedged pebbles of quartz; 5. October 10, 1905, leaves of Aromatic Wintergreen (Gaultheria procumbens) and clover; 6. October 19, 1905, clover leaves only.

WILLOW PTARMIGAN, Lagopus lagopus; 1. January, 1907, (market), stomach filled with ends of willow twigs; 2. January, 1909, completely filled with oats.

MARSH HAWK, Circus hudsonius; September 17, 1907, 2 sparrows (Vesper, or Song?).

SHARP-SHINNED HAWK, Accipiter velox; jan. y 16, 1904, 1 English sparrow.

Goshawk, Accipiter atricapillus; 1. December 17 1904, 1

red squirrel; 2. November 1, 1906, 1 grouse.

Broad-winged Hawk, Buteo latissimus; May 8, 1908, several large beetles.

Sparrow Hawk, Falco sparverius; July 26, 1905, remains of small bird.

Long-eared Owl, Asio wilsonianus; October 28, 1904, 2 mice.

SHORT-EARED OWL, A. accipitrinus; October 20, 1904, a chipmunk or similar small rodent.

Snowy Owl, Nyctea nyctea; January 1, 1906, 1 whole mouse, a large pellet of mouse hair, and 5 skulls and bones of mice or similar small rodents.

HAWK OWL, Surnia ulula caparoch; October 9, 1906, a sparrow.

ARCTIC THREE-TOED WOODPECKER. Picoides arcticus; November 21, 1904, 8 large grubs.

PILEATED WOODPECKER. Ceophlaus pileatus abieticola: November 1, 1906, two specimens, both stomachs filled to bursting with large black ants.

EVENING GROSBEAK, Hesperiphona vespertina; 1. December 20, 1908, seeds of Vaccinium. 5 per cent., cotyledons of ash and some other seed that had been enclosed in a hard shell, 95 per cent.; 2. February 13, 1909, seeds of sumach 8 per cent., seeds or rather cotyledons of a species of ash 92 per cent.; 3 and 4 February 13, 1909, cotyledons of a species of ash.

PINE GROSBEAK, Pinicola enucleator; 1. March 18, 1909, seeds and fragments of Rubus, 8 per cent., pulp or seeds, probably of conifers, but so thoroughly ground up as to be further unidentifiable, 92 per cent; 2. February 27, 1909, seeds of Rubus, 75 per cent., strips of something like bark, probably the remains of birds, 25 per cent.; 3. November 12, 1908, seeds of Rubus, 5 per cent., seeds of Vaccinium, 20 per cent., seeds all ground up to a pulp but probably of conifers, 75 per cent.; 4. November 12, 1908, seeds of Rubus, 5 per cent., seeds of Vaccinium, 20 per cent., remainder, like 3; 5. January 18, 1909, seeds of Fraxinus americana more or less broken; 6. February 27, 1909, undeveloped flowers, probably of a poplar, 92 per cent., pulp of fruit. probably of apple, 8 per cent.

PINE SISKIN, Spinus pinus; April 24, 1909, a few remains of ground-up seeds.

SAVANNA SPARROW, Passerculus s. savanna; bits of a beetle, probably a Tenebrionid, 12 per cent., skins of caterpillars, 13

per cent., seeds and fragments of Echinochloa crusgalli, 75 per cent.

Fox Sparrow, Passerella iliaca; 1. April 22, 1908, seeds of Phleum pratense, and 2 or 3 of a small Rumex; 2. April 24, 1908, a hash of beetles and true bugs in about equal proportions, 50 per cent., small larvæ, probably lepidopterous, but too badly crushed for positive identification, 40 per cent., bits of seeds of Lithospermum, 10 per cent.; 3. April 24, 1908, remains of beetles all broken up, in which can be distinguished a weevil and an Aphodius, 66 per cent., trace of a bug, remains of spiders, 10 per cent.; 2 small millipeds, 6 per cent., one beetle larva, probably an Elaterid, 3 per cent., seeds and fragments of Lithospermum, Panicum, and Polygonum, 15 per cent.

Cedar Bird, Ampelis cedrorum; June 11, 1907, full of cherry blossoms; 2. Full of Eulecanium fletcheri, a parasite on the white cedar (named after Dr. Fletcher).

BOHEMIAN WAXWING, A. garrulus; 1. March 1, 1909, pulp, skin and one seed of apple; 2. Same date, pulp and skin of apple.

NOTES.

THE BLACK RAIL IN ONTARIO.—In a review of Macoun's "Catalogue of Canadian Birds" by "W. E. S." who is, I presume, W. E. Saunders, the statement is made with regard to the Black Rail that "the three records given are none of them thoroughly reliable, one was a bird seen in flight; another refers to the taking of a number of specimens in he Dundas Marsh, which have since proved to be the Virginia Rail; and the third depends uson the ability of a gentleman the honesty of whose intentions is not open to question, but who may have fallen into the same error as did Mr. Nash regarding the Virginia Rail."

As I am responsible for the record of the Black Rails taken by me in the Dundas Marsh on the 18th of August, 1874. I should be glad if W. E. S. will let us know when and by whom it was proved that my specimens were Virginia Rails, and upon what evidence he has based his statement.

C. W. NASH.

A Few Winter Bird Notes.—Mr. Eifrig's note on the abundance of Redpolls in the spring of 1909, which appeared in the September number of The Ottawa Naturalist, reminded me that these same birds were exceedingly numerous in this

district at the same season; as stated, they were most common at Ottawa in April, whereas in this district they were seen in enormous fl. cks early in March. They frequented orchards and meadows overgrown with weeds. I examined the crop of one and found it to be filled largely with the seeds of Amaranthus sp.

Meadow-larks are not in this district strictly migatory; a few individuals are to be seen during the winter frequenting stock yards and other sheltered spots. In the winter of 1908-09, during the colder periods, I found seven of these birds frazen to

death in a barley stack.

Another bird that was more than usually abundant was the Bohemian Waxwing. These birds were to be seen in large flocks during the winter. They move rapidly from spot to spot, producing a loud whirring sound with their wings, each bird taking flight at the same instant and alighting with the same wonderful precision. They are attracted to the berries of the Mountain Ash, descending in clouds upon the trees and removing every berry. They then descend to the ground and pick up what has been shaken down.

E. P. VENAPLES, Vernon, B.C.

BIRDS OF ALBERTA.—In the October number of The Ottawa Naturalist, appears a list of birds of central Alberta, by Mr. S. S. Stansell, and in the contemporary number of the Auk, there is a similar list with more complete notes, by the same writer. Neither of these two lists agree with my experience in those districts, nor do they agree with each other, and I would suggest a revision of the remarks made in regard to the following species:—

American Golden-Eye, "Very rare." In the Auk this is stated to be quite common, which it doubtless is in the migrations

and probably breeds in some numbers.

Rusty Blackbird, "Most common Blackbird." In the Auk it is stated that this species is outnumbered by Brewer's Blackbird and this is doubtless true, although both of them should be fairly numerous.

White-winged Crossbill, "Common breeder." In the Auk this species is marked "Once seen." Doubtless this bird is considerably irregular in the West, as in the East, and it is altogether probable that it may breed in that territory.

Evening Grosbeak, "Quite common breeder." Stated in the Auk to be quite rare. The latter remark is probably correct.

Gray-crowned Leucosticte, "Abundant winter visitor." Stated in the Auk to be quite rare. This is probably an irregular species whose numbers will vary in different seasons.

Nelson's Sparrow, "Once seen." The note in the Auk reads,

"Fairly common," which it probably is in suitable locations.

Whooping Crane. Stated in the Auk to be common, but omitted from the list in The Ottawa Naturalist. This is doubtless exceedingly rare as Mr. Preble in his "Birds of Athabasca-McKenzie District." reports that "it has now become almost extinct in the north."

Lincoln's Sparrow. This bird is not mentioned in either list. Mr. Preble calls it "The common song sparrow of the region," referring to a district not very far from Mr. Stansell's location, and it is certainly a common breeder in the Red Deer district and becomes less so farther south, the inference from which is, that it would be more common in the north.

It is unfortunate that so many errors should have crept into such an interesting paper, and it is to be hoped that Mr. Stansell will have an opportunity of revising this work in the near future.

W. E. SAUNDERS, LONDON, ONT.

The Parasitic Jaeger Near Ottawa. In the first part of September of last year (1909), Mr. George Smith brought me a bird with the remark that he had a "web-footed hawk." The bird had been shot on September 4th on the Ottawa River, near the mouth of the Lievre. Although the bird did not turn out to be the astounding monstrosity the captor had pronounced it, it is, however, a remarkable capture for the Ottawa district, it being nothing less than a Parasitic Jaeger, Stercorarius parasiticus, a new record for the vicinity. It is a bird of the year, that is, in the brown plumage, in which the young gulls and their allies are often so puzzling. I have identified it beyond doubt by comparing the skin with material in the Field Museum. Chicago, kindly placed at my disposal by Mr. C. B. Cory and Mr. Wilfrid H. Osgood.

It may also be worth mentioning that we have both the species and the subspecies of the Palm Warbler. Dendroica palmarum. On comparing the skins in my collection with those of the Field Museum, I find that the species D. palmarum is here at least as a migrant, one of my specimens being taken on May 10th, and one probably belonging here taken on Sept. 20th. The form breeding in the district, however, that is at the Mer Bleue only, so far as I am aware, is undoubtedly the subspecies, the Yellow Palm Warbler, Dendroica palmarum hypochrysea.

SPRING EXCURSIONS.

At a meeting of the Excursions Committee held on the 5th inst., the following Spring sub-excursions were decided upon:—

April 16th—Rockcliffe. April 23rd—Britannia.

Apri' 30th-Billings' Bridge.

May 7th—Blueberry Point, near Aylmer. May 14th—Beaver Meadow, near Hull.

CORRESPONDENCE

EDITOR, OTTAWA NATURALIST .-

Not having a photo I send a rough pencil sketch of a freak of nature in the shape of two cedar trees (Thuja gigantea) naturally grafted together on the property of my brother, Mr. A. B. Anderson, South Saanich, B.C., the like of which I have never previously experienced in all my travels through the forests of Gregon, Washington and British Columbia. The butts of the original trees are about 15 feet apart and the point of junction I judge to be about 18 feet from the ground; the size of the butts being respectively about 2 and 3 feet in diameter. Apparently the larger tree had fallen over (probably in youth) on to the smaller and presumably by continual friction had effected a junction; the larger tree then taking precedence and forming the head, the top of the smaller being eventually forced out of place.

This is not a case of a tree having grown on the trunk of a fallen tree and the roots thus forming an arch after the disappearance of the dead trunk, as is frequently the case, as can easily be seen by the distance of the trunks from each other and the height at which the junction is effected.

It would be interesting to learn whether any of your readers know of a similar case.

J. R. Anderson, Victoria, B.C.

MEETING OF THE BOTANICAL BRANCH.

The ninth meeting of the Botanical Branch was held at the home of Mr. W. T. Macoun, Experimental Farm, on March 5th, 1910. There were present, in addition to the Chairman, Messrs. G. H. Clark, R. B. Whyte, L. H. Newman, H. Groh, A. E. Attwood, W. H. Harrington, Dr. Blackader, and Prof. J. Macoun. The subject chosen for the evening was "Hardy Herbaceous Plants," with especial reference to the habitats of the

herbaceous perennials tested at the Central Experimental Farm, of which over 2,000 species and varieties have been grown. These have been obtained from the wild, from nurserymen, and from many persons who have collections of herbaceous perennials. A large number of species have been grown from seeds which were donated by botanical gardens and private individuals in many parts of the world; among these being the botanic gardens at Kew, Dublin, Copenhagen, Upsala, Lausanne, Nancy, Lyons, Tabor, Jurjew, St. Petersburgh, Odessa, Tiflis, Siena, St. Louis, Tokio. Miss Willmott, of Warley, England, has been very generous in supplying seeds. Most of the plants are raised from the seeds in beds outside, a lath screen being used to shade the beds, making conditions better for the young plants,

It has been noted that annuals are most abundant in climates where there is a wet and a dry season, the reason apparently, being that seeds are able to withstand extremes of drought and heat better than roots. Seeds also appear to withstand extremes of cold better than roots. There are comparatively few annuals which are natives of Canada, and most of these are found in the dry districts. Most biennials appear to be natives of temperate climates where there are no very low temperatures and where there is an abundance of moisture. There are few biennials native to the colder parts of Canada. There are few troublesome biennial weeds in Canada. The sappy shallow roots do not seem to stand the sudden changes of temperature. Herbaceous perennials are most abundant where there is a good distribution of rainfall, and where the cool weather of autumn favors the development of roots. The deeprooted perennials are, many of them, natives of the coldest and also of the drier climates where their deep roots are able to withstand extreme conditions. The shallow rooted perennials spread much more rapidly, as a rule, than the deeper rooted ones. Most of the shallow fibrous rooted species do best in moist ground; but those which bloom in the spring when the ground is moist are, for the most part, natives of rocky or mountain regions. The shallow rooted perennials with fleshy roots, such as Aquilegia, are not long lived as, like biennials, fleshy roots are exposed to sudden changes of temperature. They do best in well drained ground.

There was considerable discussion in regard to the observations which had been made as to the habitats of herbaceous plants, the members present agreeing on the whole with the conclusions drawn. It was thought that if gardeners studied more the habitats of the plants they cultivated better success

would be obtained.

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