

Toronto Field Naturalists' Club

FEBRUARY MEETINGS

Monday, February 4th, 1952 at 8.15 p.m.

at the

ROYAL ONTARIO MUSEUM

MEMBERS' NIGHT

Speakers

Mr. A.A.Outram, President T.F.N.C.
"What is a Conservation Authority?"
Movies of the Don Valley.

Dr. W.W.H.Gunn, Recently appointed secretary F.O.N.
Animal sound recordings from Algonquin Park.

Mrs. Vivian G. Wilcox, Aurora
South Africa - Country of Contrasts and Contradictions. Illustrated.

Mr. A.W.Bunker - Movie "Cormorants"

ROTUNDA DISPLAY

A display of nature photography by the members
of the Central Y.M.C.A. Camera Club.

FEBRUARY HIKE

Saturday, February 9th.

Cedarvale Ravine - 2 p.m.

Meet at Boulton Drive entrance to the ravine.

In charge of hike - Mr. R. M. Saunders.

Secretary - Mrs. J.B.Stewart, 21 Millwood Road, Toronto.

Toronto Field Naturalists' Club.



NEWSLETTER

Number 105, January 1952.

One of the most remarkable bird movements through this region in recent years has been the migration of brown-headed chickadees during the past fall and early winter. Mr. Arnold Dawe, Chairman of the Records Committee of the Toronto Ornithological Club, has been busy compiling an account of this invasion. He has been good enough to allow his report to be published here, for which we are very grateful since the readers of the Newsletter will be much interested to know some of the facts on so unusual an event in the bird world.

Mr. Dawe writes: "During the fall of 1951 there were several interesting bird movements. Beginning about mid-August an unusually early and heavy migration occurred around Toronto consisting of several species of warblers, among them a large number of bay-breasts. Also included was a noticeable number of red-breasted nuthatches. In September great flocks of blue jays were seen flying westward for several days. October brought several Canada jays to southern Ontario, and an extremely heavy migration of pipits was observed. Most northern finches have put in an appearance, with evening and pine grosbeaks extending their journey over a very wide area. The evening grosbeak first appeared here on October 10th and was subsequently seen over wide areas of Ontario. The pine grosbeak came early in November. A wave around October 28th took spectacular numbers of both species into Maine. Massachusetts reported large numbers of both. Morgantown, West Virginia, had a phenomenal flight of evening grosbeaks and unusual numbers of pine grosbeaks before November 24th. Maine also reported unusual numbers of nuthatches late in November and an unprecedented flight of white-breasted nuthatches occurred on South Bass Island, Ohio, during the last two weeks of October where this bird is usually rare.

The flight which caused most comment in Toronto was, however, a rare and spectacular invasion of black-capped and brown-headed chickadees in numbers which were previously unknown.

The black-capped chickadee ranges over a good deal of north-eastern North America, usually as a rather common bird. In the southern part of its range it is considered very sedentary, but in the north it is reported to make regular local or limited migrations.

The brown-headed chickadee normally is known as a non-migratory, more or less sedentary species, inhabiting the boreal forest across Canada, particularly the spruce habitat within this forest. In Ontario it is to be found from Lake Nipissing northward to the tree limit, and extending to both the east and west boundaries. South of the Lake Nipissing line it is found breeding in isolated and suitable areas in Parry Sound, Muskoka and Algonquin Park. It inhabits Quebec, being found as a breeder south to about 75 miles north of Quebec City; its range extends into Gaspé, New Brunswick, Nova Scotia, and Vermont. Its occurrence in winter south of this region has always been considered as sporadic or even accidental.

The history of its earlier appearances in southern Ontario is a record of a very small number of birds. It was noted at Bowmanville on January 21st, 1881. The next bird was one collected at Richmond Hill about 1890. Mr. John Baillie was told that this bird was the rarest bird shot on a Sunday School picnic, to win a competition among the participants, many of whom apparently attended the picnic well armed.

Twenty years later one was recorded in November, 1910, at Rockwood, near Guelph. Point Pelee next produced a single bird on May 2nd and 3rd, 1914. Two birds were collected of three noted at London in the winter of 1919-20. One of these was also recorded on the Christmas census. A 17 year blank then occurs before one was recorded at Corbyville in Hastings County, on November 5th, 1936.

In 1937 a suggestion of a small flight was to be found locally in the occurrences of two birds at Holland River swamps, two at Nancy Lake in King Township, two at Ashbridge's Bay and three other local records of single birds all noted between October 29th and 31st. One or two remained and were seen at Nancy Lake up until the 30th of December, 1937.

During January and February 1944, seven years later, a bird was seen repeatedly at Buffalo, New York.

A suggestion of a flight is to be found with ten records at hand between October 27th and December 5th, 1946, at the following places: Pefferlaw Creek, Scarboro, Toronto, Angus, Barrie, Maple and Stouffville. Except for a group of four at Pefferlaw Creek on November 4th, these records were all of single birds. On December 22nd, one was found at

Thistletown on the Christmas census, and it remained there until January 12th, 1947. In 1947 one was listed on the Christmas census for London, Ontario. A lone bird at Hamilton on March 17th, 1947, was possibly on its return journey, as was also probably a single individual seen at Wasaga Beach on April 27th. Until the present flight, no brown-heads have been reported since then. None of the previous records indicate whether or not the black-capped chickadee was involved in any previous invasion as they have been in this present movement.

Outside of Ontario in the adjacent states, the situation is similar with three exceptions of which I am aware. Michigan has few records with none in the interior. Ohio had one previous record a few years ago. There are no records from the Finger Lakes region of New York, and only the one Buffalo record which was mentioned earlier. The three exceptions were incursions into New England, where the bird's status is generally much the same as here, in the years 1913-14, 1916-17, and again in 1942. A short summary of the two earlier flights, based on accounts in the Auk of 1917 and 1918, by Dr. C. W. Townsend, and Horace W. Wright, and notes by others, is of interest. Dr. Townsend determined from specimens obtained that the chickadees of the 1916 incursion were of the Labrador sub-species, whereas the 1913 incursion had been of the Acadian sub-species from Nova Scotia, New Brunswick or extreme northern New England. This meant that the 1916 birds had flown by or over the Acadian chickadees, and apparently had not disturbed them, as none were collected. The 1916 flight was somewhat larger in number and also more extensive in range. This flight was traced from Hatley, Stanstead County, Quebec, through New England, particularly around Boston, Mass., south to Long Island, Staten Island and Plainfield, New Jersey. Early to mid-October were the arrival dates in both cases. The birds remained common for a few weeks, gradually diminishing in number. All the 1913 birds had disappeared by early February 1914. A return migration of the 1916 flight was evident during early May around Boston, and in later May at Hatley in Quebec. In March, 1917, the first record for the state of Pennsylvania was made in Lycoming County. Later in June two pairs at different places in Pennsylvania were found, both in sphagnum bog areas. No nest was discovered in either case. Large numbers of other northern birds travelled much farther south than usual that year, as they have done during the present movement.

This brings us to the present invasion and we shall attempt to trace it according to the records obtained. The earliest and farthest east record came in September when a considerable migration of brown-heads at the Lower Moisie River, about 300 miles above Quebec City on the north shore of the Gulf of St. Lawrence was reported to W. E. Godfrey by Mitchell Campbell. Some 75 miles north of Quebec City at Ste. Anne de la Pocatiere, an unusual number of brown-heads were noted during the last of October. Mr. Lewis M. Terrill reported from Montreal an estimated 250 black-capped chickadees on September 29th,

considerably more than are usually seen at that time, and brown-heads, first seen on October 21st with frequent observations to November 23rd.

Two early records for Ontario, three at Toronto, October 3rd, and one in Dummer Township, Peterboro County, on October 4th, were forerunners of a tremendous wave which was recorded across eastern Ontario, Haliburton, Peterboro and Prince Edward Counties, in the Toronto area, and as far west as Ancaster in Wentworth County on the week-end of October 20th and 21st. By the 22nd at least one bird had arrived at London, and the first bird was reported from Point Pelee on October 27th. It appears that this invasion of both black-caps and brown-heads entered the province from the east at about Ottawa, and flew quickly in a definite southwest direction following the Lake Ontario shore west from about Picton to Hamilton, again striking off across land and reaching the Lake Erie shore at about Pt. Burwell, following it to Point Pelee. Chickadees of both species were everywhere, in marshes, open farm land, city streets, and downtown areas for from ten days to two weeks, with the numbers gradually tapering off. Flocks of 5 or more brown-heads with black-caps were commonly seen. 180 brown-heads were seen in the Toronto area on October 20th and 21st. The northern limit of this flight seems to have been Haliburton County between October 20th and November 15th, Simcoe County, October 29th to November 4th, Grey County, November 4th, and Bruce County, October 11th to November 29th. North of this area reports stated black-capped chickadees were more numerous than usual but brown-heads were to be found only in their usual habitat and numbers.

Many stragglers were left behind as the flight pushed on, but these also appear from reports to be on the move southward and westward. They do not stay generally in any one place for very long.

In New Brunswick there were very unusual numbers of black-caps during the latter part of October and the first two weeks of November in the central and southern part of the province. Early indications from Maine were that chickadees were in normal numbers, but a December letter from Mr. Packard states that unusual numbers of chickadees are present this year, particularly the brown-head, reported as far south as Brunswick, which is quite unusual. Farther south in New England nothing unusual has been reported.

Returning to Ontario we find Kingston did not report any brown-head observations until November 3rd, then again on November 18th and 25th. Brockville had one brown-head on November 11th and more black-caps than for years.

Next, from Rochester, New York, apparently by way of the south-east shore of Lake Ontario, come four records involving at least six birds between November 4th and 26th. At Lancaster, Pa., chickadees have appeared at a feeding station for the first time in several years. They are probably black-capped, but this is in the area where black-caps and Carolinas overlap and they were not positively identified.

The directness of the invasion was emphasized when the entire Niagara Peninsula region, with the exception of a lone brown-head at Buffalo on October 27th and 28th, was bypassed, even though a path 50 or so miles wide across Ontario was literally crowded for several days. Every spot of the area was thoroughly searched, I understand, before another brown-head finally turned up at a feeding station in Port Colborne on November 27th. No more have been reported. Only one brown-head has been seen at Long Point, on October 27th.

For several days, it seems, chickadees were pouring into Point Pelee. On October 30th one or two brown-heads with many black-caps were seen on Fish Point, Pelee Island, but none were reported further west on the mainland. It was November 16th before black-capped and November 19th when three to seven brown-headed chickadees turned up on South Bass Island, Ohio, much to the surprise of Dr. Milton B. Trautman, who had not expected to see them there, but had expected they would go around the Lake Erie shore. Two other records for Ohio were reported, two near Waterville, November 11th with black-caps, and one near Holgate, November 17th. There are other records which I have yet to receive.

It apparently was quite some time before any number moved along the north shore of Lake Erie into Michigan. Although no other records from Essex County, Ontario came, a flock of five brown-headed chickadees arrived at the University of Michigan feeding station at Ann Arbor, December 2nd; four more were identified with about 45 black-caps on Grosse Isle, Wayne Co., Michigan, on December 12th. A recent letter from Miss Margaret Nice to Dr. Murray Speirs states that the chickadees have got as far as Chicago, where at least two brown-heads have been seen. This is the extent of the flight as we know it to the present time.

During the main invasion the brown-heads did not keep to their own habitat, but were seen to feed almost anywhere, goldenrods, small bushes and other vegetation close to the ground were favourite places. Flying in a flock at a height of several feet across open areas was a regular occurrence. Any object in the line of flight was a target and many birds of both species came to grief in this manner. This flight is all the more remarkable when a person realizes chickadees are generally considered very weak flyers, and the known distance travelled is approximately 1500 miles.

Several wintering records have come to my attention in the past few days. One bird at a feeding station in York Mills was on the Toronto Christmas census list, and I understand another regularly visits a feed-station on Bayview Avenue. Hamilton's census list also had a lone bird from Ancaster, and a second was seen on December 29th. A feeding station at Creemore in Simcoe County is being visited regularly. Other birds have been seen since the invasion, usually in evergreens, particularly cedar and spruce.

Where the invasion originated we do not know. It was, according to

all indications, somewhere in the east, possibly Labrador or Ungava. We may be able to tell when Dr. Earl Godfrey, of the National Museum, Ottawa, has completed his sub-specific identification of specimens obtained.

A positive reason for it is not known. It may be over-population due to a good breeding year, failure of food supply or possibly a severe winter ahead. But did the same cause affect the other species involved in a winter incursion this year? We shall have to wait for the answers from further study.

It is interesting to speculate what may happen to these hundreds of brown-headed and thousands of black-capped chickadees which were involved. They may have a noticeable return migration, may attempt to breed, or both, or just vanish where or how we may never know."

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One of the outstanding birds of the recent Christmas census was seen in Moore Park ravine. Stuart Thompson has kindly sent in the following interesting description of that observation. He says, "While out with Mr. L. L. Snyder this morning (December 23rd) in Moore Park ravine, we saw a small bird flitting about the undergrowth near the creek. Though the light was poor we could see it was a wren. Naturally we thought it to be a winter wren. The season was right, but it seemed too large, yet it could hardly be a house wren at this time of year. To see the bird from both directions I went down into the valley while Snyder remained above on the trail. Thus I could see the bird's outline against the sky while he could see any colors against the snow. From my point of vantage I could see that the bird had too large a bill and too long a tail for a winter wren; at the same time he could see a very brown back and light eye-line. The question now was, all other wrens being eliminated, could it be a Carolina? I recalled having heard this bird singing in this spot last spring, but it seemed hardly possible that a Carolina wren would linger here so long. All this time the bird kept mounting the tree higher and higher. This action alone was unlike the thicket-loving winter wren, or the house wren, and seemed to confirm our verdict that it was a Carolina. Then, when we had quite come to this conclusion and the bird itself was high in the upper branches, suddenly it burst into the well-known clattering song of the Carolina. It was as though the wren said to us, "Well, now that I have put your powers of observation to the test and you have come to the correct conclusion, I will verify it by my song."

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In the midst of January, snows we are reminded of the warmth of mid-summer and the vital life of August days by the story of a dramatic observation made by Mr. L. T. Owens of this club last summer. That it took place in the middle of the city should remind us all that one does not need to go far from home to see the wonders of nature if one

keeps a watchful eye and an open mind. Mr. Owens writes, "On Saturday afternoon, August 4, 1951, I had my first experience in observing two cicadas emerging from the nymph stage on two separate occasions during that afternoon in Mount Pleasant cemetery.

After spending three years underground the cicada climbs, usually a tree stem, and takes a firm grip with its sharp claws, a grip that must be secure, as the sequence of events will show. The skin then splits from the head down the back; the first movement in this ruptured section is part of the head protruding. Very slowly now, more of the new body appears. The observer then notes that the insect is coming out upside down. The nymph, clutching the bark, is, of course, facing the tree. In extricating itself from its prison the cicada must, of necessity, emerge in a reverse position, as it would be impossible to escape safely in any other way. The head comes first, somewhat depressed - the cicada's head is relatively large - then a minute trembling motion is observed as the body follows, slowly slithering out. The wing cases are noticed as two greenish lines on the body. When most of the body has emerged the legs, upright in the air, are in motion as if feeling for a foot-hold. The insect is now nearly out, and I say to myself it will soon be emerged entirely. But no, it remains in that horizontal position, slightly pendulous, with its legs moving. What delays it now when it has so nearly finished its exit? We shall see. I have mentioned that I saw two cicadas emerge. The first had gone as far as I have already stated when I grew impatient, and as I thought that the insect was in difficulties, I touched its posterior with a pencil. The cicada dropped to the ground, so I picked it up and placed it in the crotch of the tree.

I went then to another section of the cemetery for an hour or so. On returning to check on my cicada - which I later termed number one - I found the insect still in the crotch of the tree with the wings upright and fully expanded, waiting for the newly fledged wings to harden that it might take flight.

On looking down to the recently cast skin I observed with surprise another cicada just in the first stage of emerging. It went, of course, through the same procedure, but this time I did not touch it, but I waited for the further developments. As the cicada was lying stretched out I noticed the two green lines of the wings were slowly expanding. I knew then why the insect, almost fully out, was so long in that horizontal position. It was waiting for the wings to expand. But what held it in that position? I then examined number one, which had not as yet moved from the tree crotch. Under a glass I observed a hook-like organ on the posterior part of the body. This then was the explanation how the cicada could remain so long stretched out. Without its wings the creature was helpless.

Number two cicada, still clutching the tree stem with its wings now expanded, bears down releasing the toe hold on the nymph skin,

turns its body to the bark and seizes this with its sharp claws, and assumes an upright position. Then, with the hardening of the wings, it is ready for its short life in the tree tops.

Without accurate timing, the change from the nymph stage to the adult was, I should say, about an hour and a half. If it is a male, soon the shrill mating song, made by membranes in the thorax rubbed rapidly together, will be heard, usually on very hot days. The female lays her eggs and both adults perish in the autumn."

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For a long time the Federation of Ontario Naturalists has been considering ways and means of increasing the services that it can render to the people, especially the naturalists, of Ontario. Now a program, designed to accomplish that end, has been drawn up. As the largest club associated with the F.O.N. the T.F.N.C. is naturally called upon to play a large part in the carrying out of this program. That the members of our club may know better what is involved, we are reprinting here the admirable statement of the program drawn up by Professor J. R. Dymond and published in December in Bulletin No. 54 of the F.O.N.

T H E M E M B E R S H I P C A M P A I G N

"The Federation has accomplished much in conservation and in spreading an understanding and appreciation of nature during the 20 years of its existence. This has been done entirely by voluntary effort. Now the needs and opportunities are much greater than can be met in the spare time of a few individuals.

After the most careful study of the problems involved, it was decided at the 1951 annual meeting to employ a full-time paid managing secretary. A highly qualified person is now available for the position.

To render a service to the cause of nature education and conservation and to meet the opportunity which now faces the Federation, action must be taken within the next few months.

To employ a full-time paid managing secretary with proper qualifications, provide office and secretarial assistance, travel, printing, etc., approximately \$8,000. a year is needed. Between \$3,000. and \$5,000. of this is in sight, but a sum of approximately \$4,000. must be provided through memberships. Our present membership income is less than \$800. a year. The amount of \$4,000. can be raised if everyone interested in the study and conservation of nature in Ontario lends a hand, but it will involve a tremendous, special effort.

Individual members and member clubs must unflinchingly face the necessity of what in many cases will amount to real sacrifice. Though

the great majority of the Federation's loyal, enthusiastic adherents belong to the low-income class they will be called upon, for a brief period of years, to increase voluntarily the amount of their annual contribution. The various local and regional clubs of the Province must clearly see their duty to pledge themselves, for an initial trial period at least, to making annual donations of very substantial amounts. Help must be expected from sources that have hitherto been untapped; an endeavour must be made to translate the openly expressed sympathy of the Federation's many friends and organizations into donations of generous proportions.

Many persons of considerable wealth are interested in the work of the Federation and the programme it supports. Because their financial support was not needed in the past they have not been approached. Now is the opportunity to secure memberships and donations from such persons.

In a trial span of three years an efficient full-time secretary would, the Executive confidently believes, so augment the membership of the Federation and the amount of its annual income as to make the organization genuinely self-supporting. Under vigilant and energetic direction this status should continue on an expanding scale.

Here's How We Are to get \$4,000. in Memberships

The work of raising \$4,000. may be divided as follows:

TORONTO.....	\$ 1,800
HAMILTON.....	500
LONDON.....	500
GUELPH.....	150
OTTAWA.....	150
CHATHAM.....	80
PETERBOROUGH.....	80
KINGSTON.....	80
KITCHENER - WATERLOO.....	80
PORT ARTHUR - FORT WILLIAM..	80
ST. THOMAS and WEST ELGIN...	40
BARRIE.....	40
BELLEVILLE.....	40
WOODSTOCK.....	40
Province-at-large.....	350

The above is a tentative allocation. If any community feels that its interest and ability have been underestimated, the Directors will be happy to revise their estimates.

How Individual Members Can Help

Two ways in which individual members can contribute are:

1. Increase personal contributions at least for a year or two until our full-time secretary can become established and through his efforts stimulate nature activities so that more and more support will be forthcoming.

It costs most of a \$1.00 membership to print and distribute Bulletins and take care of running expenses. It is suggested that each member at least double his contribution for a year or two. As many as possible should consider raising their contribution to \$5.00 or \$10.00.

But we need all the members we can get even if they cannot pay more than One Dollar. Through the Federation we want to develop a larger and larger body of naturalists informed as to the needs of nature education and conservation. We want to be in touch with as many naturalists as possible. A One Dollar membership will enable us to do this, but it leaves little for expanding the work.

Send your personal membership and donation as soon after January first as possible.

2. Secure new members.

Unless members secure other members the campaign will fail. We have only our members on whom to depend to secure others. Non-members will not do it. We haven't funds to employ professional canvassers. In any case, unless the naturalists of the Province are sufficiently interested in their Federation and what it stands for to enlist the support of others there is no point in employing a paid secretary; one man cannot carry the load alone.

Local committees will be formed to organize teams in the various centres for a membership canvas. Start now to compile lists of persons likely to be willing and able to become members so that these will be available when the canvas gets under way.

But it is not necessary to wait for the official opening of the campaign. Send in new members anytime.

Special Contributions

There are in every community persons of larger means than those of the average naturalist who are sympathetic to the ideals for which the Federation stands. Special committees must be set up in various communities to enlist the support of such persons. Because of the way the Federation has operated in the past it has never appealed to many of this type. However, its aims are high enough and the quality of its leadership such that we should be able to appeal with confidence for the support of men of means interested in conservation and nature education.

Accomplishments of the Federation

A list of some of the accomplishments of the Federation illustrates not only the type of work it carried on but indicates the sort of programme which will be undertaken much more vigorously if a full-time secretary is available.

Nineteen annual meetings held at which papers and addresses by prominent naturalists have been presented.

Thirteen Summer Nature Schools held where hundreds have qualified as nature leaders for schools, nature clubs, Boy Scout and Girl Guide groups, summer camps, etc.

Fifty-three Bulletins (originally circulars) issued keeping members in touch with developments in conservation and nature education in Ontario and elsewhere.

Annual Regional Gatherings of Naturalists held in various parts of the Province."

R. M. Saunders
Editor