



TORONTO FIELD NATURALISTS' CLUB NEWSLETTER

Number 259

April 1971

IN THIS ISSUE--ALL THE LATEST "DOINGS" ON THE JIM BAILLIE RESERVE

For newer members who may not be familiar with the details of the Reserve, Prof. William Andrews, chairman of the Ecology and Conservation Group, has prepared a short article providing some information.

For all our members there is a report by Mr. John ten Bruggenkate, chairman of the Management Committee of the Reserve, outlining some of the developments that have taken place on the site.

There is also a map prepared by Mr. Jack Gingrich, showing the exact location of the Reserve.

We have been encouraged by the generous response from many of our members to our appeal for funds to pay for the Jim Baillie Reserve.

WE STILL NEED THE HELP of those who have not yet contributed if we are to succeed in reaching our goal of \$20,000.

If you have not already contributed, we urge you to use the coupon below -- NOW!

This is your Nature Reserve! Please help!

To Mr. A. D. Fry,
250 Martin Grove Rd.,
Islington, Ontario.

Date _____

I enclose cheque/money order made out to the "Toronto Field Naturalists' Club" in the amount of \$_____ as a donation toward the purchase of our new reserve.

Mr/Mrs./Miss _____

Address _____

APRIL MEETING

Monday, April 5, 1971, at 8:15 p.m.
at the
ROYAL ONTARIO MUSEUM

TWO SPEAKERS FROM THE JUNIOR CLUB

THREE FILMS: "Where Eagles Swim" -- Photographed off the west coast of B.C.

"The Origins of Weather" -- Weather phenomena explained by live
photography and animation

"Private Life of a Kingfisher" -- This film deals with the small
European kingfisher (not our belted kingfisher).

IN THE ROTUNDA:--An opportunity to contribute to our Jim Baillie Reserve Fund
...for the first time....or even the second.

--"Insignia" for your Spring walks: TFNC armband, \$1.25....
TFNC decal for your car window, 50¢....and FON checklists for
recording your birding observations, 5¢ each, 25 for \$1.00.

--THE ONTARIO FIELD BIOLOGIST, issue #24, just published.....
see page 17 of this Newsletter.

Next month: Annual meeting with election of officers (see pages 9 and 10)
Speaker: Fergus Wilson
Subject: "A Naturalist's View of Quetico Park"

SPRING OUTINGS

For outings to be held in April, May, and June, please see the enclosed booklet.

The following outing was (intentionally) not listed in the Spring Outings booklet:

FOR BEGINNERS ONLY--BIRDS

Leader: Prof. Wm. Andrews

The group will be restricted to 12 members--the first 12 to call Prof. Andrews at
425-4607 on Wednesday, April 14, after 7:30 p.m. If unable to call at that time, try
again on Thursday, April 15; there may still be room. Location and time of outing
will be announced when you make your reservation. Those who have attended previous
beginners outings may also call.

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NOW IS THE TIME to put out bird boxes! Boxes may be obtained without delay from
Mr. E. C. Franks (phone 425-5302).

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AN INTEGRATED ZOOLOGICAL-BOTANICAL GARDEN FOR TORONTO

by N. P. Badenhuizen
Chairman, Department of Botany, University of Toronto

In 1963 I wrote an article "How Toronto conserves nature for its citizens" for "Veldtrust", the journal published by the National Veld Trust in South Africa, of which I had been a trustee during the time I was Professor and Head of the Botany Department in the University of the Witwatersrand in Johannesburg. South Africa has a long-standing reputation in the field of nature reservation, and Veldtrust was concerned with problems like soil erosion and the encroaching desert, problems of vital interest to that country. On assuming a similar post in the University of Toronto in 1961 I was naturally interested to see what Ontario was doing in this field and I was happy that I could report on the achievements of the Conservation Authorities in Ontario, and also on the parks created by Mr. T. W. Thompson, Metropolitan Parks Commissioner, in the valleys of the Don and the Humber, achievements, which Toronto can be proud of, which are eye-openers to our visitors, and all developed in the last 15 years or so.

Plans were being made then for establishing Zoological and Botanical Gardens, to be located in the Don Valley south of Eglinton. However, a survey showed that the dangers of flooding would be too great in that area, and the plans were abandoned. In the meanwhile the construction of what promises to become the finest Zoo in the world in the Rouge Valley area is now in an advanced stage, but no interest so far has been shown in the botanical aspects in Toronto, while Johannesburg is now making a first-rate Botanical Garden. Is a collection of living plants less important than a collection of animals?

We are of the opinion that the establishment of a Zoo on a 1000 acres plot is a unique opportunity to combine it with a beautiful park of botanical interest. In a time when more than 80% of the natural vegetation of this world has been changed or destroyed, with a continuous threat to the rest brought about by pollution, it is good to remember that there would be no animals (including ourselves) without the green plants. It is the green plant (there are also plants lacking the green pigment) which through its chlorophyll takes up carbon dioxide from the air and transforms it into food (sugars, proteins, fats, etc.) by means of a complicated process called photosynthesis. For this process sunlight is necessary, and all organisms derive their energy from that source: plants directly, animals indirectly.

Right from the beginning of his history on earth, man has collected plants and hunted animals for survival. Gradually he learned to cultivate some plants for his own use, while deriving pleasure from the beauty of ornamental ones. With agriculture, settlements became possible, and the rise and fall of civilizations has been closely linked to the ability to grow plants under various climatological conditions, which often underwent great changes.

The first botanical gardens originated in Europe and were established by physicians who cultivated medicinal plants, or by monks who tended herb gardens for the cloisters. Later they became attached to universities, mainly in the 16th century, for the scientific study of plants. These early gardens were founded in Italy, Holland, Germany and France, and are still in existence. Others followed, and their description can be found in a book recently (1969) published by MacMillan, New York (E. Hyams and W. Macquitty, Great Botanical Gardens of the World).

Some of them, especially Kew Gardens near London, but also Amsterdam, have long acted as a place of exchange for many plants that became world crops. The whole rubber industry, for instance, dated from a few pot plants grown in the greenhouses in these gardens. Research continues in this direction, because there are still many treasures to be detected, but the main emphasis is nowadays on ornamental plants. South Africa, with its immensely rich flora, has been a major contributor to world horticulture, so that many of its plant species can now be bought in our flower shops (Freesia, Gladiolus, Gerbera, etc.).

At the same time Botanical Gardens have been the guardians for wild species that were on the verge of extinction, sometimes with just a few seeds that were saved by accident. Many such species are now grown in abundance for our delight. And think of what we would have missed, had the coffee plant become extinct before we discovered its use!

A botanical garden provides the material for much scientific work directed at a better understanding of the life functions of plants and their heredity. The results of trial gardens are visible in the production of new varieties of ornamental plants, which can be displayed in colourful borders. And there is the important function of the classification of the plants, and their testing against local climatological conditions when imported from other countries.

But apart from the scientific functions we must consider the enormous educational value, especially for the city dweller. Plants are so interwoven in our life that we do not see them any more and take them for granted, although they provide us with food, shelter and clothing. Nevertheless, where the opportunity exists to see plants in beautiful arrays and arrangements, or in their natural setting, people do become interested. They are fascinated by collections of wild plants in rocherries or fens, of trees from foreign countries, of medicinal and economic plants. How many know what a potato plant looks like, or what are the common weeds? How many are acquainted with the indigenous flora of their own country? Even for the blind one can provide a special garden, where plants are recognized by their fragrance.

Toronto has a long history of attempts at the establishment of a botanical garden. Long ago one was projected in Queen's Park; before the war a site was chosen at Sunnybrook, where now the hospital stands; and there was actually one in existence for 8 years at Glendon Hall, until it had to give way in 1961 to York University. One of the arguments against a Botanical Garden in Toronto has been that there was already one in nearby Hamilton, but it should be clear that we have a concept that differs from Hamilton's, beautiful as those gardens are.

It is our opinion that we now should not seek the establishment of a Botanical Garden separate from the Zoo, but that the opportunity should be taken for an integration, emphasizing the mutual dependence of both plants and animals. The time to give this idea serious consideration is now. It is necessary that the botanical aspect be recognized in a Zoo of the scope of the one presently planned. Surely there will be a space for layouts of interesting vegetational plots in such a large area. And who is going to determine what plants are found in the natural territories of animals from different parts of the world?

In this way it should be possible to go build a beautiful park with added interest for the public, that would also provide new ideas for gardeners and landscape architects, and which would display the plants and their relationships to animals.

It is our hope that Toronto will use the opportunity of creating a park which is truly integrated in the biological sense.

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BIRD NOTES FROM ORTON, DUFFERIN COUNTY

by J. F. Ashdown

Today a confirmation of something long suspected but lacking in proof. One of the feeders is stocked with whole corn and sunflower seed primarily for the bluejays. If the large seeds are mixed with smaller grain and cracked corn the jays throw most of this to the ground in their search for the larger seed. To date the highest count of jays at the feeder at one time is ten. However, even this number could not account for the speed with which the seed disappears if the birds simply ate what was required to

fill their crops each visit. They were obviously carrying some seed away. Watching them with binoculars one could see them fill their crops and many could be seen taking off with two and three seeds showing along the partly closed bill. There was no particular pattern in the direction each bird took to the surrounding bush. Sometimes the flights were long while others were to the nearest line of trees. Today one bird made several trips to the rear of the house where the garden plot is located and landed at the base of several of the cedar posts which form part of the garden fence. Investigation showed, in each case, a small hole punched in the snow and about 2½" down but not on the ground four and five sunflower seeds had been cached. I suspect the jays work on a saturation principle: spread enough around and when you are hungry your chances of finding some of the seeds would be in proportion. Probably the squirrels, mice and voles recover far more than do the jays. My problem is how to convince the bluejays that I guarantee a constant supply of food to the end of winter so they really don't need a reserve supply scattered over 100 acres.

**** The number of Downy Woodpeckers feeding at the suet log has now reached six, five males and one female.

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BOARD DOINGS

by Clive Goodwin

Members will think that we talk about little else but money at meetings of the Board. We do have a multitude of other matters to attend to, but of necessity the status of the Jim Baillie Reserve appeal, and the management of the reserve, occupy a lot of our time. So it's appropriate, I suppose, to talk about these matters first.

We relaxed our appeal a little after Christmas to give everyone an opportunity to catch their breaths, but now e are off again. We are well over \$8,000 now, but there is still a long way to go that \$20,000. For anyone who wishes to donate again we will remind you that we are now into a new taxation year - and donations are tax-deductible.

The time is opportune to enlarge on some matters which members have queried. First of all, we actually own the Reserve. Most appeals are for things people would like to do, but this one is different. We gave \$18,000 for it, and we hold a mortgage. If you work this out we paid \$300 an acre, which is a reasonable price for land anywhere near Toronto, particularly as there is a growing demand for loam. Our \$20,000 appeal includes \$2,000 to cover the multitude of expenses involved in a land purchase, and in setting up a reserve.

Elsewhere in this issue there is an article by Bill Andrews, discussing the value of reserves in general and this one in particular. New members should find this useful in determining what all the fuss is about, and it may clarify some questions for older members as well. I will only mention one point here: the role of the Conservation Authorities in this field. Some naturalists' clubs elsewhere have got together with the local Authority, and purchased land in conjunction with them. There is no Conservation Authority on Uxbridge Creek, so our activity represents an initiative in that area. However, even where an Authority is active it complements, rather than duplicates, the kind of work we are doing. The Metro Authority, with its "Support Conservation, enjoy Recreation" slogan, is obliged to seek out lands of a broader recreational or flood control potential for its purchases. Once land is in public hands it is also difficult to initiate the kind of detailed, continuing surveys and management that we envisage. We hope that, to a large extent, the programme on our reserve will pioneer such work in Ontario. But more of this later.

Turning to other matters, we had not intened to submit a Brief on the Quetico Park issue, but many of our members were concerned that we should respond. At the last minute we were given access to a discussion brief used by the Conservation Council, and -- with suitable revisions -- it proved satisfactory to our purposes. Our gratitude to

Audrey Sellick and her helpers; getting an 18-page brief put together in a couple of days is no easy task.

Finally, yet another questionnaire! You will think we have gone mad on questionnaires, but we are concerned about the problems of communicating with our booming membership, and we also need help! About 50% of our members are new since our old survey was taken, and the questions we ask new members do not fill the bill, simply because they are so new. So -- soon -- you will be receiving another. Please respond!.

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COMING EVENTS

Royal Ontario Museum: Free Sunday lecture series, 2:00 p.m. in the R.O.M. theatre.
Subject: Evolution - 1971.

- March 28 - Fossil Man (by Becky Sigmon)
- April 4 - Fossil plants (by John McAndrews)
- April 18 - Cultural man (by Peter Storck)

Canadian bedrock in time and space; display of geological maps -- to April 4.

McLaughlin Planetarium: Giant Planets - Jupiter, Saturn, Uranus, Neptune -- to April 18.
Information: 928-8550.

Federation of Ontario Naturalists: March 27-28, Swan weekend at Long Point.
April 23-25, Annual meeting, Ottawa

Toronto Parks Department: Conducted Sunday walks, 10:00 a.m., with Parks Commissioner Tommy Thompson. Further Information: Syd Nicol 367-8176.

- March 28 - Central Don Park - 10:00 a.m. from parking lot at Edwards Gardens to Sunnybrook Park.
- April 25 - Highland Creek Park, Morningside Ave., Scarborough.

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LATE WINTER OBSERVATIONS OF HAWKS AND OWLS

by Sheila McKay

On February 7th, just as the sun was rising, Paul Catling, Myrle and Trevor Hamilton, and I, stepped from the warm car. We were ready for a day of hawk and owl "hunting" in the Malton-Claireville area. In particular, we were hoping to see a large number of Long-Eared Owls which had previously been observed by a resident ornithologist.

The brisk and clear morning air seemed very cold, but perhaps it was just the excitement of a hike through a snowy woods that made my toes tingle (I wish it had been!). Even though walking was difficult through the deep crusted snow, we were all enthusiastic; so onward we continued, sometimes plunging up to our thighs in the drifts along the hillside. Beneath the trees there was much evidence, in the form of pellets and droppings, that hinted of their presence, but still no owls.

Far ahead of us now, Paul was suddenly rewarded by a spectacular sight: 25 Long-Eared Owls roosting in a hawthorn tree. Although he waited for the rest of the group before attempting to approach the birds more closely, many of the owls had already flown to a more secluded section of the woods by the time we arrived. However, 7 remained in the roosting tree, 4 of them standing side by side on a branch, appearing as miniature soldiers guarding their fortress against invaders. We quietly moved closer. When we were about 30 feet away only 3 owls still remained, but we were able to have a remarkably good look at these members of the group.

Each owl possessed a slightly different countenance: one peered through eyes opened wide with indignation and wonderment; another nonchalantly, with eyes opened only a little, appeared somewhat drowsy and oblivious of its intruders, while the third seemed to be hiding from us, with eyes tightly closed and dark wing directed toward us, blending in well with the adjacent tree trunk. Of course all looked similar with their dark ear tufts and rufous facial discs, yet each was distinct, even to the detail of leg feather colour: one had rufous, another had tan coloured feathers. It was really exciting to have an opportunity to observe these owls at such close range, but it sure was cold and standing still didn't keep us very warm, so Myrle, Trevor, and I proceeded to flush the other owls back to the roosting tree (by walking to the north end of the woods) while Paul stayed and photographed the returning birds. Myrle counted 36 owls as they flew through an open area, toward the southern section of the woods. What a thrill to see an almost never-ending stream of Long-Eared Owls in flight!

As might be expected the Long-Eared Owls were our most exciting find of the day, but hawk observations were also interesting. Throughout the day we saw quite a number of Rough-Legged Hawks in this area: both light and dark phase. The large flat fields west of Toronto are reminiscent of the arctic tundra where most Rough-Legged Hawks spend their summer, so these hawks must feel quite at home when they winter here. Although many were seen on the ground feeding, none was observed actually capturing prey. In addition to many Rough-Legs, a number of Red-Tailed Hawks, as well as 2 Kestrels were sighted.

Before lunch we had still another treat. As we approached a hemlock grove, a crow about $\frac{1}{4}$ mile away began cawing loudly while flying in our direction. Another crow soon joined in and both, alighting in a hemlock beyond the grove, continued their noise. We soon discovered that the crows were harassing a Great Horned Owl that had probably been disturbed by our approach. Before the owl flew again, this time with a noisy escort, we were able to get a fairly good look at him.

As our last stop for the day we determined to search the rear of Boyd Conservation Area for a pileated woodpecker. But in the woods composed mainly of hemlock, we found only the characteristic oval excavations in the trees. However, on the snow, at the edge of one of the ravines, several drops of blood and a few Saw-Whet Owl feathers implied a recent mouse kill, but we could not find the little owl because there were so many thick hemlocks in which it could hide. Although we looked in many trees, there were many more that were not searched. In this protected ravine, we saw our first pussy willows of the year, their gray furry heads conspicuous beyond the single bud scale. So as we returned home, we could enjoy the pleasant thought that spring was probably "just around the corner".

Two weeks later when we re-visited the Claireville area, spring had certainly not arrived yet. There was still plenty of snow on the ground and a certain winter briskness in the air. Although very excited about our previous success, we had no idea that on this occasion we would be even more fortunate, especially in our owl finding. Naturally our first interest was in the Long-Eared Owls. Were they still here? Sure enough they were! Again we watched the large birds glide like ghosts, silently and effortlessly, among the hawthorns. When we discovered them, the Long-Ears were roosting in the same tree as before. Intently I stared at the tree trying to ascertain the actual number of owls present, but to my amazement birds I had not observed took flight one after another. So well adapted are the Long-Ears for hiding that their plumage, which resembles bark, renders them extremely inconspicuous in their roosting places. A few owls, perhaps those we had studied before, were very tame and did not fly until we were very close, thus affording us another excellent opportunity for observation. When many pictures had been taken and myriads of pellets been collected, we decided that it was time for our departure so that peace and tranquility could prevail once more over the hawthorn woods.

In a thick cedar row, not too far away, we had a "tête à tête" encounter with a member of the smallest species of owl found in Ontario. Yes, we found a tiny Saw-Whet Owl resting ever so quietly about 10 feet up in one of the cedars. The little sprite glared down at us with bright yellow eyes. Although everyone was anxious to have a very

good look at such an unusual winter bird (usually only one is reported on the area's Christmas Census), we were all careful not to frighten him. The Saw-Whet had been resident in the area for most of the winter (proved by banding) and had been seen regularly by local bird-watchers. However, this was our first glimpse of a Saw-Whet this year, so quite a while was spent admiring the fine little fellow.

On our way to the next location, we saw a Horned Lark in a fallow field just north of Claireville. Other bird-watchers, a week earlier, had sighted a flock of these birds north of Toronto on Steeles Ave. The Horned Lark is our first spring migrant, so despite the weather, I suppose to naturalists, theoretically spring is already here for the migration is underway.

Having been given information regarding another group of Long-Eared Owls, we were eager to find them. While driving along one of the county lines north of Hwy. 7 we stopped to investigate a row of cedar trees by the road. An abundance of pellets was scattered beneath the trees, but not until one flew did we realize that there were owls in the foliage above - and not just Long-Ears, but Short-Eared Owls as well! We had never expected such good luck!

The crepuscular (active mainly at twilight) Short-Eared Owls provided us with a marvelous aerial display, gliding high above the open fields nearby. However, the nocturnal Long-Eared Owls did not indulge in such exhibitions, but flew back into the cedars as soon as they could. A detailed comparison of the owls was possible when both a Long-Eared and Short-Eared Owl were observed in the apple orchard close to the evergreens. In general aspect the darker Long-Ears seemed much more slender, an attribute which was probably accentuated by their long ear tufts and by the continuation of the elongated arrow-like markings on the breast to completely cover the underside. The plumage of the paler Short-Ears was a very light tan colour below the streaked breast region and the short ear tufts were hardly visible. Moreover, the brightly coloured facial disc of the Long-Eared Owl contrasted markedly with the round pale brown facial disc of the Short-Eared Owl.

Long-Eared and Short-Eared Owls are the only two species of owls that are gregarious in winter. As well as groups of Long-Ears (our first location) and groups of Short-Ears, it is not uncommon for a group to contain members of both species (as was the case here). This grouping of individuals during winter is not completely understood but is probably a survival adaptation to ensure protection against larger predators and possibly also for more efficient hunting when prey is not abundant, although I do not believe that either of these theories has been substantiated. From the number of pellets we collected at both locations, the owls seem to be procuring food efficiently. In the hawthorn woods we found the feathers of one owl that had not survived, but there were still 39 remaining Long-Ears, so group protection seems to be fairly effective.

In addition to the three species of owls, Rough-Legged and Red-Tailed Hawks were sighted during our Sunday outing but the Rough-Legs did not seem to be as abundant as they had been two weeks earlier.

.....to be continued.

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REPORT OF THE NOMINATING COMMITTEE

According to By-law No. 1 of our Incorporated Club, the nominating committee must nominate candidates for the following positions each year: President and Vice-President for a one-year term, and three Directors for a three-year term.

The complete Board of Directors for the 1970-1971 club year has been:

President: Mr. Clive E. Goodwin
Vice-President: Miss Rosemary Gaymer

Immediate Past President: Mr. John A. Gingrich
Directors retiring in May 1973: Mr. John ten Bruggenkate, Mr. Trevor Hamilton,
and Miss Erna Lewis
Directors retiring in May 1972: Prof. Wm. Andrews, Mr. Paul Catling, and Miss
Emily Hamilton
Directors retiring in May 1971: Mr. S. A. Corbett, Mr. Mike Singleton*, and
Mr. Douglas Wilkins**.

*Mr. Singleton was chosen recently by the Board of Directors to fill the vacancy which has existed for some time due to the resignation of Mr. Walter Hutton. This has not been put before the membership for ratification because of the short time remaining until the annual elections.

**Mr. Douglas Wilkins became a director in January 1970 to replace Mr. Jack Cranmer-Byng, who resigned.

The Nominating Committee recommends the following nominations:

President: Mr. Clive E. Goodwin
Vice-President: Miss Rosemary Gaymer
Directors (to retire in May 1974): Mr. S. A. Corbett
Mr. Mike Singleton
Mr. Douglas Wilkins

The Annual Meeting at which the elections take place will be held at the Royal Ontario Museum on Monday, May 3, at 8:15 p.m.

According to By-law No. 1 of our Incorporated Club,

"Nominations of members of the Corporation (i.e., the TFNC) may be proposed in writing to the Secretary by any three members of the Corporation accompanied by the written consent of the nominee. Such nominations shall be published in the May issue of the Newsletter and the names of such nominees shall be added to the list of candidates submitted by the nominating committee and shall be presented to the annual meeting."

John A. Gingrich,
Chairman, Nominating Committee

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THE JIM BAILLIE NATURE RESERVE

A PROGRESS REPORT

by: Bill Andrews

Many months have passed since the club purchased its first (and, hopefully, not its last) nature reserve. The executive of the club purchased the property on your behalf, confident that the required \$20,000 could be raised through a special fund-raising drive. The response to the appeal for funds has been most encouraging, but we have not yet reached the half-way mark. The intent of this article is to reassess the specific values of our nature reserve, in the hope that this will stimulate those who have not yet made a donation to do so. Those who donated in 1970 are subtly reminded that it is now 1971, and that donations are income tax deductible.

GENERAL DESCRIPTION

This 60-acre tract of land lies along the west bank of Uxbridge Brook, on the seventh line of Scott Township, off Ontario County Road #1. The property is dominated by trees that are characteristic of lowlands areas of this type - white cedar, balsam fir, and paper birch. A dense understory makes travelling difficult but provides excellent habitat for a wide assortment of wildlife. Numerous springs arise throughout the property, creating many cool, sparkling streams that wind their way through a moss-covered sub-stratum to Uxbridge Creek.

WHY DID WE BUY IT?

The usual reason for creating a nature preserve is to ensure that a piece of land remains in an 'untouched' condition. This permits interested persons to study a natural environment for both scientific and aesthetic reasons. Property such as ours is obviously a unique type of habitat that is required by certain species of wildlife. Yet, such land is usually deemed worthless by most people unless it can be drained, cleared, and either cultivated or 'developed'. Thus, by setting aside this piece of property we insure that wildlife will have a small piece of suitable habitat in the future. Urban sprawl has virtually eliminated such areas within a 50-mile radius of Toronto. Hunters make other areas uninhabitable by many species of wildlife.

The area also performs functions that are not of direct value to its permanent residents. It helps to maintain the water table at an acceptable level throughout the surrounding countryside; it provides a base of operation for hawks and owls that keep mice populations in check in the nearby fields and meadows; it provides nesting sites for seed-eating and insect-eating birds that perform a needed service to farmers in the area.

Of what direct value is it to you, the owners? I am sure that many of you contributed to the fund because you felt a moral commitment to preserve the area for some or all of the reasons I have just stated. And that is, without question, the way it should be. I am also sure, however, that most of you hope to eventually receive some direct value, educational or recreational, from the property. At the moment, the property is virtually impassible in many spots. Throughout most of the property you have to struggle over fallen trees, across boggy areas, and through the underbrush. Without a compass or a keen sense of direction, you are likely to get lost. Further, you are likely to do irreparable damage to many of the micro-communities. Therefore, in order to make it possible for club members to explore the property without collapsing from total exhaustion and without damaging the environment, nature trails will be constructed. First, though, a detailed survey is being done to establish the best locations for trails. After this has been done, the potential of the property is unlimited. Here are a few things that we can do:

- a. Ecological Studies: The forest appears to be in a sub-climax stage and will likely remain in this stage so long as the environmental conditions remain as they are. Thus long-term ecological studies of this type of community can be undertaken. Secondary succession is underway on one recently cleared section of the property. A study of the stages in plant succession that occur in this area should be of considerable interest to you. Relationships between the environmental factors in the area and the plant species present can be determined. A study of how the animal population fits into the overall picture should prove exciting. The creek, itself, should provide many hours of ecological studies.
- b. Botanical Studies: The botanists in the club have an opportunity to do many things here that they cannot do in other areas that they visit. Plant surveys that are not just descriptive but also quantitative can be carried out. Comparisons can be made between the types of plants that border the creek and those found in the dense shade of the inner regions. The typical plants of lowlands areas can be studied. Of particular interest are the plants in and along the creek. How many of us have studied

emergent and submergent aquatic plants in detail? The diversity of each species on our property should present a challenge to the most ardent botanist.

- c. Zoological Studies: At the present time the property is not suited to the usual type of birding outing. As soon as a grid system has been established by the survey teams, however, interesting projects can be undertaken by birders. Most obvious would be a breeding bird census. Next in line would be studies of the territorial ranges of individual birds, studies of the relationships between food supply and population density for various species, and investigations of the competitive relationships that exist between differing bird species that occupy the same habitat. Similar studies can, of course, be conducted for the many mammalian, reptilian, amphibian and aquatic animals in the region.
- d. Recreational Aspects: If you are not interested in detailed studies but simply wish to enjoy 'primitive nature', you should be able to do so as soon as the trails are established. The trails will take you through regions that will not be upset too much by the establishment of trails. They will, where possible, take you through or past a variety of communities so that you can appreciate the diversity and uniqueness of the property that you have purchased - which brings us back to a point I made at the start of this article: we still need more money to pay for the property.

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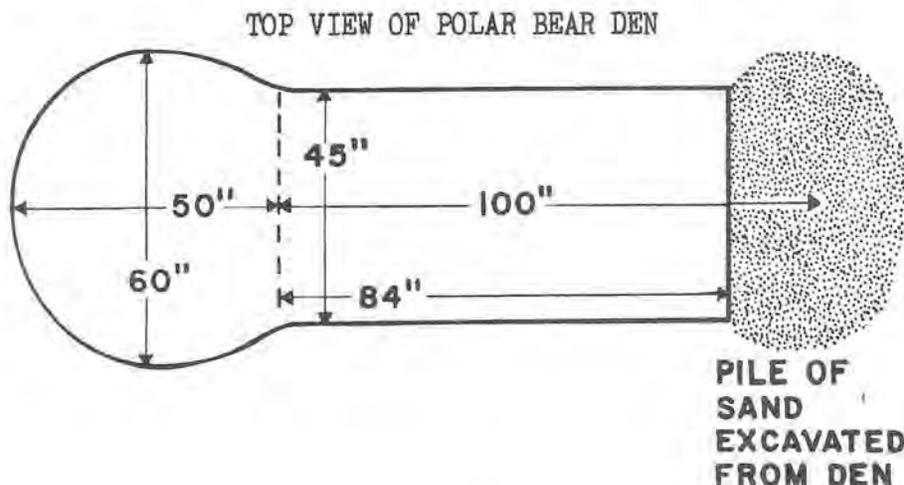
POLAR BEAR DENS

by A. A. Outram

The January 1971 Newsletter (No. 256) carried a very interesting account of a denning area, south of Churchill, Manitoba. Apparently this was recently discovered. In 1935 a denning site was visited by mammalogists on South Twin Island in James Bay. There they found very many polar bear dens in sandy ridges. The caves varied from ones freshly excavated to others long since abandoned and almost obliterated in the soft sand.

The scientists believed that this had been a major denning area for perhaps hundreds of years, but even in 1935 they thought that polar bears (the only species of bear to use the island) were less numerous than formerly. The polar bear, Thalarctos Maritimus, is a large mammal and females may weigh up to half a ton. In view of this it might be expected that the dens are large. Some were measured on South Twin Island and the sketch below shows the size of an average den, which does not seem very big for a mother bear and two cubs. Most dens were near the top of a ridge with willow roots, which had extended down, chewed or broken off.

Of course many polar bears hibernate and give birth to young in holes which they dig in packed snow.



MID-WINTER WATERFOWL INVENTORY - January 10, 1971

by Toronto Ornithological Club

Compiled by C. E. Goodwin

Mute Swan 2; Canada Goose 608; Blue Goose 1; Mallard 2,386; Black Duck 824; Gadwall 50; Pintail 1; Green-winged Teal 1; Am. Widgeon 7; Wood Duck 1; Redhead 15; Canvasback 14; Greater Scaup 8,441; Common Goldeneye 520; Barrow's Goldeneye 2; Bufflehead 320; Old Squaw 5,778; Harlequin Duck 1; King Eider 1; White-winged Scoter 1; Common Scoter 1; Hooded Merganser 2; Common Merganser 205; Red-breasted Merganser 2.

TOTAL 19,184

17 Observers, Whitby to Bronte

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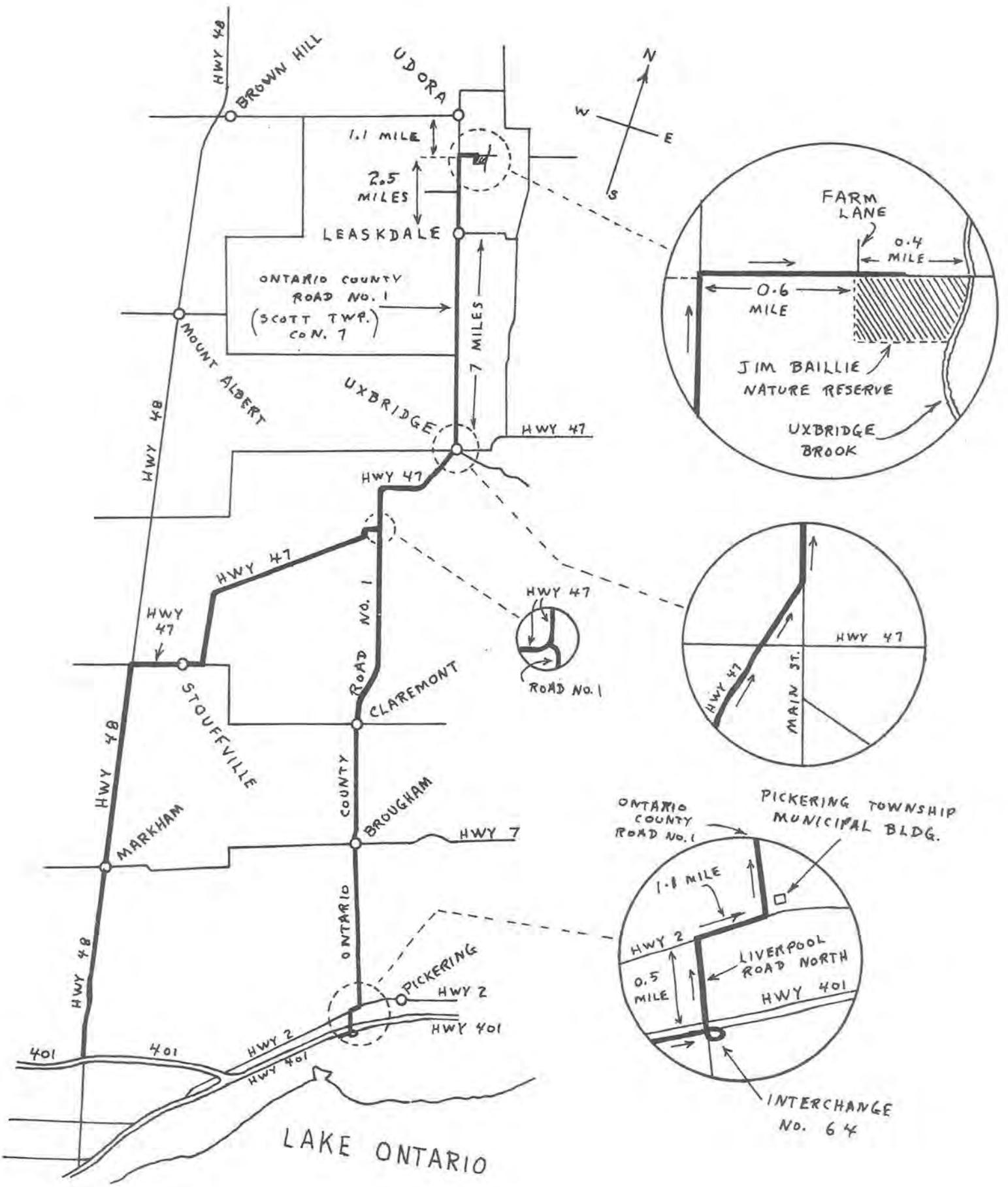
SURVEY OF JIM BAILLIE NATURE RESERVE

by John ten Bruggenkate

As you may already know, the Land Management Committee for the Jim Baillie Nature Reserve started working towards its first objective last November: A survey. Although we are not attempting to do an official legal survey at this time, we want to be able to orientate ourselves, for a number of good reasons. For instance, mapping of existing features such as old trails and rivulets would assist us in making future decisions regarding a modest trail system, to make our property reasonably accessible. Also we would like to know and mark where the boundaries are, and we would require landmarks for use in such ventures as a breeding bird census. The survey map would form the basis for locating and mapping of any nest, plant or other natural feature on the reserve. Last but not least no one likes to become lost!

To achieve this we are now laying out a grid; part of it by means of a survey instrument, the remainder by picket and compass, and of course a surveyor's chain. We are driving in wooden survey stakes with reasonable accuracy along the outside boundaries using a transit, and also running north-south lines through the entire interior of the property using compass and measuring tape. There will be a line at every 200 feet. As well 2 inch by 2 inch by four feet long cedar posts are being placed at 200 foot intervals on every line. There are there to stay permanently. Each carries an indication on its four faces telling you what you are so many feet south and so many feet east of the base reference point which is the north west corner of the reserve.

Progress to date is as follows. Survey parties of TFNC members ranging from two to eight people commenced on November 14, 1970 and went up to Uxbridge every weekend thereafter, up to and including January 16. In spite of the very good intentions of a few for the Christmas holidays, we were shorthanded during that period, and had to cancel operations for the last two weekends of December. After braving the various vagaries of winter weather, we had to postpone our activities in mid-January on account of the very poor condition of concession road No. 7. Surprisingly enough, despite the accumulation of snow at that time we were still able to work on the property, though not too fast, (someone's car got stuck repeatedly!). An expedition to Uxbridge was made once, sometimes twice, every weekend and in total so far 10 days have been spent on surveying; a total of 208 hours of pretty hard work. Thirteen different persons were involved and 10 different cars; altogether we drove 1500 miles. Up till now some 60 stakes have been placed. We owe many thanks to George Fairfield, who lent us all the costly equipment and who directed the overall plan of attack. All the survey instrument work was done by him. Jim Clulow, our marvelous compass operator, spent many endless days in the field working with great patience and boundless zest. Our past president Jack Gingrich did a lot of very accurate work for us; also several other people who offered their time and talents generously. Each participant thoroughly enjoyed this somewhat unusual experience and really got a feeling for our first and exciting nature reserve. There was lots of good humour during those days. Some judicious clearing of underbrush appeared necessary at the odd location, but this was kept to an absolute minimum, in order to cause as little



Directions for reaching the Jim Baillie Nature Reserve

disturbance of the vegetation as possible. In addition a number of signs were placed along our borderlines to prohibit hunting, and trespassing by non-naturalists.

It is our intention to complete the survey this spring, as soon as ground conditions and weather permit. A few adjustments have to be made. Three more lines should be run, including the western boundary. A small section of the difficult, dense southern boundary remains to be finished and several signs are yet to be posted. A good guess is that approximately 20 stakes and some 10 signs are still to be located and placed. About 6 more days of work are needed, involving a number of people. Wouldn't you like to join us?

Upon completion of this very basic and vital step, the survey, other activities are in the offing, as for instance building simple parking facilities and trails. Are there any club members with expertise in these activities? These tasks should also prove to be very interesting and will require some people. Volunteers, experienced or not, are invited to help the Management Committee. Please don't delay but phone

John ten Bruggenkate at 425-6096.

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As one president to another: an exchange of letters.

Dear Mr. Birks:

It has been reported by some of our members that recently Birks has been running a series of radio commercials promoting the sale of genuine alligator skin bags. We are particularly concerned about this type of promotion, and indeed with sales of such skins in general.

At present the demand for exotic skins has brought many species of reptiles to the point where their populations throughout the world are in serious danger. The laws in the countries of origin are too often inadequate--or inadequately enforced--to control hunting. Many of the skins currently available are from animals poached in the U.S., a matter of serious concern to authorities there.

The hope for the future of these species seems to lie in convincing those who service and provide the North American market to refrain from trading in these skins. There are excellent alternatives, and it is in the long-term best interest of the trade itself to avoid wholly eliminating these commercially valuable species.

Could we ask your Company to establish a level of corporate responsibility in ceasing to offer these skins for sale? The moral issues in this matter are now well established and accepted. Meeting a "demand" no more justifies pushing an animal species to extinction than it justifies merchandising drugs or people. The attempt to save these animals for the future is occupying the attention of responsible agencies and governments across the world.

Would Birks help?

Yours sincerely,

Clive E. Goodwin,
President

Dear Mr. Goodwin:-

Thank you very much for your letter, and be assured I am completely sympathetic to your policies.

The difficulty is, I think, that competition in the retail trade is such that you will not prevail upon any one firm to desist from selling articles made of alligator skins. Even if you could get all the major firms to agree, some minor companies, especially shoe stores, would continue to offer shoes and handbags of alligator.

I might inform you that the handbags of alligator are made in France and Italy and that the reptiles were gaken in Madagascar. Apparently there is no protection for alligators in that part of the world. To the best of my knowledge none of the skins come from the U.S.A. Even if you could get such merchandise taken off the market here, Canadians who travel to Europe would be inclined to bring home goods made of alligator.

Unfortunately, I do not believe you have much hope of preventing the sale of articles made of alligator skins. I wonder, also, if you are making any effort to stop the hunting of deer and other such animals. Wolves and other predators kill off weaker specimens while man makes every effort to kill the best of them.

Yours very truly,

Victor M. Birks,
President.

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A FLIGHT WITH AN OWL

by Catherine Cratchley

Have you ever scanned the fields of Malton in mid-Winter from the Observation Roof of Toronto International Airport for the sight of a Snowy Owl? If, perchance, you happened to be there on the morning of December 27th, 1970, you might have spotted a special one of these visitors who seem to return to this area year after year.

Flight 690 - departing Gate 60 for Barbados and Trinidad, 9:15 a.m. Sunday, Dec. 27 - All one hundred and eighty-two passengers and crew occupying all the seats on this 'stretch D C 8 Jet' - A grey, overcast morning - We were airborne now. We had been given life raft drill; immigration cards for arrival in the West Indies had been distributed and everyone seemed settled for the flight that would take approximately four and one-half hours, flying at 33,000 feet, to make its first landing at Bridgetown, Barbados. Then the aircraft seemed to falter, a sensation of descent was felt, the lights were on to fasten seat belts and no smoking. Seconds later the First Officer announced, 'We are experiencing a malfunction in No. 4 engine. No cause for alarm but fasten seat belts, put seats in an upright position and no smoking!!!--

Many minutes later we were told that we would have to return to Toronto Airport but first we would have to dump fuel as the aircraft was too heavy to land. We were flying over water now, Lake Ontario, and later we were told that we were over Kingston, Ontario, flying at 7,000 feet and would soon land at Toronto as the aircraft's weight was now within the range of safety to land. Shortly after we made an extremely smooth landing back where we had started from. All 182 of us left the aircraft and 'herded together' in the same departure lounge we had left a couple of hours earlier.

Minutes passed, then a supervisor came over and asked me, 'Would you like to know what happened to the engine?' I'm just thankful to be back safely, I thought. 'It was a bird,' he said. 'A bird' I exclaimed, 'What kind?' 'Who knows, but there won't be

much left of it,' he replied.

We found out later that it was a Snowy Owl - drawn into the engine shortly after take-off. This beautiful bird - to have caused such concern, trouble and expense - to have turned back such a huge jet, influenced the lives of nearly two hundred persons - and lost its own life over the snowy fields that it loves so well. Being safely on the ground I felt sorry for the bird. Surely with our great technological advances some way could be devised to overcome this hazard about which I had read but never thought I would experience.

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I MUST PUT SOME STATIONS IN THE SUNFLOWER!

by Patricia Weese

The sun is rising earlier these mornings; but not I. Birds are becoming active earlier; but not my brain. And so it is with the rest of my family. Since the feeding station and suet log hang outside our kitchen window, the 7:45 breakfast table is early enough for our birdwatching in any season. This winter has not produced a great variety of feathered visitors to our yard - just the old faithfuls - pigeons, starlings, house sparrows, downy woodpeckers, chickadees and blue jays.

One morning, however, a male cardinal brightened our view by feeding on a few remnant sunflower seeds. How disastrous! An almost empty station for such a distinguished guest! Determined to be a better hostess in future, my mother declared in good early-morning style, "After breakfast I MUST put some stations in the sunflower!"

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231-1064

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