

TORONTO FIELD NATURALISTS' CLUB NEWSLETTER

Visitors welcome!

APRIL MEETING

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Monday April 5, 1965, at 8:15 PM  
at the  
ROYAL ONTARIO MUSEUM

SPEAKER: DR. J. BRUCE FALLS, Department of Zoology, University of Toronto.

SUBJECT: A NATURALIST'S IMPRESSIONS OF AUSTRALIA.

Through the media of words, slides and tape recordings, Dr. Falls, a recent visitor to Australia, will deal with the landscape, flora and fauna of that far-flung continent, and will also comment on its naturalist groups and its conservation aspects.

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SPRING OUTINGS, 1965

Thanks to the efforts of Mr. Jack Gingrich and his committee, and to the co-operation of all those who have agreed to lead outings, we are able to present a program of spring outings which should make every naturalist's heart quicken with anticipation. Extra copies of this booklet are available for mailing to friends and prospective members. Kindly phone the Secretary.

JUNIOR CLUB The Junior Field Naturalists' Club will meet on Saturday, April 3, at 10.00 a.m., in the Museum theatre.  
Director - Mr. Robert MacLellan - HU 8-9346

BOTANY GROUP There will be no more indoor meetings of the botany group this season. Botanists are referred to the many botanical trips listed in the Spring Outings booklet.

CHECK LISTS Now is the time to stock up with R.O.M. Checking Lists for your spring birding. Available at the April meeting - 5¢.

HASTINOTES Hastinotes in beautiful wild flower designs would make appropriate Easter gifts. Twelve cards in a handy plastic case - \$1.00 per package. Available at the April meeting.

AUDUBON WILDLIFE FILMS For the final lecture of the series, Dr. G. Clifford Carl of Victoria, B.C., will present Essence of Life. The unique physical properties of water make it the only substance that can serve as the basis for living things. Dr. Carl will show Audubon viewers how different plants and animals depend on this vital resource for their very existence. A colorful drama with a serious message, this should be attended not only by those already convinced, but also by the many who are not fully awakened to the importance of conservation. Will you help by encouraging friends and acquaintances to attend this significant lecture? Tickets from Eaton Auditorium - \$1.50.

The response to the questionnaire was very gratifying. Thank you!

President - Mr. R. F. Norman  
Secretary - Mrs. H. Robson  
49 Craighurst Ave.,  
Toronto 12 - HU 1-0260

# Toronto Field Naturalists' Club.



## NEWSLETTER

Number 211

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March 1965

In these early days of March the moment of new discovery is upon us. New life is springing up and a new spirit pervades the old. Grass turning green along the heat-lines on the university campus is a herald of the retreat of old, grey snow and ice as the heat from underground lends a hand to the sun-heat from above. The green tide is beginning to flow. And not only in such man-made situations as this for a few days ago--it was March 7th--we crunched across the icy slopes of the James Gardens to a spot where last year at a considerably later date we found skunk cabbage coming up in the midst of snow. This time we had to look carefully but the looking had its reward for nestling in the shelter of overarching ice where an open rill made its way down the hard-bound slope were the plants we sought. Softly green, flushed with yellow and marked with boisterous maroon, the jaunty spathes sheltering the flowered spadix,--a bold and hearty lot this advance guard of floral spring. How happy we were to see them and to read the message that they bring from out their dark and icy corner.

What it says is, soon the last of the snow will hang in shreds and tatters across emerging slopes, the final sulky piles clustering in the shade of already stirring trees. Between the vanishing remnants will arise the fresh-faced hepaticas, white and pink and blue, peering up to the sky. Nestling now in furry warmth beneath their winter cover they await only the warm assisting touch of the mounting sun to bring them shyly forth into the expectant world. It is not far away, this coming forth. With them will come all their friends and associates--the grey-blue ranks of the cohosh, yellow-medalled, marching over the sere, brown leaves, the staunch and stocky ginger, a brick-red jewel amidst grey rocks, the laughing mari-gold, sunny-faced above shining green leaves and purling dark brown water, the ghostly grey pussy willows, reaching toward the blue heaven, from whose dangling fingers each murmuring breeze will shake a dust of gold. These and a thousand others await only the elfin horn of spring. It is sounding now and the legions of life are on the move. Watch them as they come, join their ranks, and it may sound for you.

Miss Deirdre Clark, a member of the T.F.N.C. since 1960, has now gone to live in New Zealand where she has a position with the Soil Conservation and Rivers Control Council. As this post should indicate she continues her strong interest in nature and has joined a natural history society there. Recently with members of this group she made a trip to a nature reserve of great importance. Both her account of this trip and a statement of the conservation policy of the Wildlife Branch, Department of Internal Affairs, New Zealand, which accompanies it on a brilliantly illustrated folder describing this reserve will be of interest to her fellow members in this club. Miss Clark's article and the policy statement together show how much the interests and the problems of naturalists are the same right across the world.

#### A Trip to Kapiti Island - New Zealand

On January 30th, 1965, I went on my first "birding" expedition with the Wellington Branch of The Royal Forest and Bird Protection Society of New Zealand, which is the closest equivalent in this country to The Federation of Ontario Naturalists and its affiliated clubs. The Society has active branches in most of the larger towns and its stated objects are: "To advocate and obtain efficient protection of our native forest and birds and the preservation of sanctuaries, and science and other reserves, in their native state, and to enlist the practical sympathy of both young and old in these objects."

Our trip to Kapiti Island entailed a 2-1/2-hour voyage by launch. The island is a thickly wooded and very hilly 7-mile-long nature reserve off the south-west coast of the North Island of New Zealand. Before going I was warned to take extra food, as the crossing can be dangerous in rough weather, so if a storm blows up the launch cannot return to the mainland and visitors are marooned. I was told that £.25 is charged by the launch for each day it is weatherbound at the island. Thus leaders of expeditions have an anxious day.

On the way across we saw hundreds of Fluttering Shearwaters, Black-backed Gulls and the smaller and daintier Red-billed Gulls. We watched for Little Blue Penguins, which are fairly common in the Wellington area, but were unlucky. On landing from the launch in a grossly overloaded dinghy with a freeboard of about one inch, we were met by Mr. Fox, the government caretaker. Also on shore to meet us were several "Wekas" and a "Tui". The Weka is a native flightless bird, rather like a hen pheasant with a short, pointed, upturned tail and red legs. It scratches about in the thick bush and its only apparent defence is an ability to run very fast. It is a gentle and inquisitive bird but a terrible thief. It will snatch and run into the bush with an interesting object it can find and is therefore the bugbear of campers.

The Tui is rather like a Grackle with a white bow-tie, for it has a curious little tuft of curly white feathers under its throat. Its usual call consists of a loud chime on five notes, but it is also a good mimic of other birds.

Mr. Fox said, "Before you go walking I will see if I can call the birds down." He produced a block of dates and in a few minutes we were surrounded by about a dozen reddish-brown parrots. These were North Island Brown Kakas, one of the few native New Zealand parrots. They inhabit the thick bush but, thanks to the patience of Mr. Fox, about twenty of the Kapiti birds have become quite tame - in fact almost too tame - as they were determined to settle on our heads, where they perched happily digging their sharp claws into our

scalps while nibbling daintily at our sandwiches and dropping crumbs down our necks. We were warned not to touch them, as a peck from a Kaka beak can be very damaging. There was a notice on a nearby building asking visitors not to interfere with the birds; I felt that another might be appropriate asking Kakas not to interfere with visitors.

We eventually set off on a very steep 1,700-foot scramble to the highest point of the island, but time was limited and the rain came down and only a few reached the summit. On the way through the bush we saw North Island Robins--rather dully grey and white little birds but with the shape, song and characteristic quick movements of the European Robin. We also saw Bell Birds, whose song is similar to that of the Tui but more melodious, and New Zealand Wood Pigeons--the largest pigeons I have ever seen. These are quite spectacular birds with golden-green heads, purple nape, greyish-green back, pure white breast and underparts, and carmine red legs and beak. They have a very noisy flight and the beating of their wings can be heard for quite a distance in the bush. We heard, but did not see, parakeets and a bird with a shrill whistle which our leader told us was a Long-tailed Cuckoo.

The rain came down steadily but fortunately there was no wind, so we were able to embark on our return voyage to Paramata on the mainland after a most interesting day.

The New Zealand "Bush" is like none other in the world--a mixture of strange evergreen trees with unfamiliar Maori names which I find impossible to pronounce or remember. Tall tree ferns known as "Pungas" are intermingled with the trees which are also entwined with lianas. Growing on the branches of the trees are many epiphytes, looking like great clumps of iris leaves. The flowers of the forest are mostly shy little insignificant things although some of them are very sweet-scented. No splashes of colour relieve the deep green of the trees and the general appearance is therefore rather monotonous and oppressive to a new-comer like myself.

Before Man came to New Zealand--firstly the Maori and later the European--the islands were so cut off from the rest of the world that they had never been invaded by terrestrial mammals or predators of any kind. The only native mammal is a species of bat. Consequently such defenceless flightless birds as the Kiwi and the Weka were safe in their forest habitat. Although these two species still survive in protected nature reserves and remote areas such as Kapiti Island and Stewart Island in the south, many of the native birds have already become extinct and others are rapidly disappearing. Efforts are being made to preserve them wherever possible.

Europeans introduced rabbits, hares, opossums, hedgehogs, goats, deer and many other mammals. These, having no predators, have multiplied enormously and most of them are now classed as "noxious animals" to be slaughtered and eliminated in every possible way. Thus does Man in his meddling way upset Nature's careful planning.

#### Protect Native Birds

Conservation of New Zealand's birds to ensure they remain as a heritage to hand on to each succeeding generation is assisted greatly by public interest.

Many native birds are unique and have added much to our tradition. For example, the Kiwi as a national emblem has provided the name by which New

Zealanders are widely known overseas. Many birds, because they help either to distribute seeds or to control insects, are valued agents in forest preservation. Most native birds are protected by law and their deliberate disturbance or destruction can result in fines of £50. There is an earnest desire to see these birds, often rare, continue as part of the New Zealand scene.

While wildlife rangers play their important part in conservation, their difficult task can be made easier by public support. New Zealanders in various walks of life can give that support in many different ways. Sportsmen should not shoot at unidentified birds nor bushmen tolerate pigeon poaching. Landowners could include food trees for birds in plantings, and preserve, where practicable, wet lands and shallow lagoons or construct ponds in suitable country for waterbirds--the work involved would be repaid by their enjoyment in the birds they attract. City dwellers should not release unwanted cats in the bush or country, or holiday-makers disturb or interfere with colonies of nesting birds. Hunters and trappers should take care in the setting of traps and control their dogs where kiwi or weka are found. Seafarers, landing on offshore islands, should protect them for their wildlife treasures. Citizens should heed warnings against firing forests and other vegetation of value to birds. How much better off everyone would be if the economic value of living with, rather than against, Nature was fully appreciated.

As our population grows, towns spread, and development proceeds, let us give more heed to the other considerations of no direct monetary value. Many thousands of people find our birds to be a ready source of recreation and education through their scientific, aesthetic, and other values. Economic development is essential, but a place can and must be found for our wildlife, otherwise future New Zealanders will be the poorer for its loss. Widespread practical interest is necessary to ensure that New Zealand's birds remain with us as a source of pride and pleasure, a valued part of our heritage and culture.

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In the last issue of the Newsletter a letter from our member J. M. Barnett, now visiting in Trinidad, was included. It concerned bird observations chiefly. Since then Mr. Barnett has returned an answer to my query about the flowers. Even with a lack of books and professional guidance I think that our local botanical members may cock a speculative eye towards Trinidad as a future trip possibility as they read Barney's comments. He writes:

"You ask me to take a look at the flowers for you. I have been doing this since coming here and they just about drive me crazy. Unfortunately there are no botanists here and no book by which you can run them down.

"On the estate we have Lime, Oranges, Grapefruit, Banana, Guava and Mango for fruit and Coffee, Cocoa and Nutmeg. At present the valley is beautiful with the Mountain Immortel trees (Erythrina micropteryx) painting its sides with patches of flame-coloured blooms. They are grown to shade the Cocoa trees whose insignificant flowers are hard to find. The Coffee on the other hand has beautiful white flowers which I saw for the first time when I came here. In the swampy places you get the Swamp Immortel (Erythrina glauca) with peculiar yellow and red flowers and to complete this

family we have the Jumbie Bead tree (Erythrina pallida) with beautiful pink flowers and striking scarlet and black seeds. Next coming into flower is the Jacaranda or Fern Tree (Jacaranda caerulea) with its wealth of bluish-violet flowers. The Pink Poui (Tabebuia pentaphylla) and Yellow Poui (Tecoma serratifolia) should be casting their leaves and flowering soon.

"By the side of the house the Pride of Burma tree (Amherstia nobilis) is in flower and this is considered one of the most beautiful of all flowering trees.

"In the village nearly every house is brightened with Poinsettia trees in front while in the forests the Wild Poinsettia (Waiszewiczia coccinea) can be found making a splash of red amid tall tropical growths.

"There are a number of beautiful flowering trees which I cannot get identified to say nothing of the 60 or so varieties of palms.

"I could not start to tell you anything of the numerous flowering shrubs and plants to say nothing of the bromeliads, ferns, cacti, orchids, mosses and lichens growing on every tree. The native ferns of Trinidad comprise a magnificent group of plants of great variety from lofty tree ferns to tiny Polypodiums.

"Many beautiful orchids are to be found among those native to the Island. The other day one of the helpers brought in a flowering stalk of one of our orchids which was over 5 ft. long with flower groups strung sparingly along it. The other day while driving through Arima Forest I saw some Arum Lilies and got them to stop the car. Talk about Texas lilies being big, you should have seen these. Their pure white spathe was more than twelve inches long and the nearest we could get to identify them was the Maraval Lily (Spathiphyllum cannifolium)."

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#### Highlights of the T.F.N.C. Field Trips (November 1964-January 1965)

On Saturday, November 21st, some eighteen observers followed Jack Gingrich through High Park on a fall birding outing. The outstanding observation was the sight of a flock of about 16 hooded mergansers, two of which were adult males, flying up and down over Grenadier Pond. Excellent flight views of a red-tailed hawk and a great blue heron were also secured.

December 6th saw about thirty persons exploring the Bruce's Mill Conservation Area near Unionville under the lead of Miss Ruth Marshall. In addition to the 13 species of birds seen, including red-tailed, rough-legged and sparrow hawks, note was made of the fine old beech trees and the luxuriant hemlocks along the trail. This area will be opened officially this year.

On January 10th Mrs. Eve Cobb took a party of thirty-three members and friends through Wilket Creek Park. A number of these were new attendants on a field trip. It is to be hoped that they understood how remarkable it was to be able to see two horned owls, a kingfisher, both three-toed woodpeckers, a crow, a robin and a northern shrike all on one winter's trip in a Toronto ravine.

Saturday, January 25th, a day of cold, snowy weather, found a dozen hardy souls following Jack Gingrich along the paths in the Boyd Conservation Area, a very good winter observing region. Even on this difficult day those who braved its blasts were able to have excellent looks at four long-eared owls, both nuthatches, a brown creeper and a cardinal. Some of the group also saw a pileated woodpecker, a species that is a permanent resident in the area.

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A most interesting and suggestive experiment in the biological control of mosquitoes has, in the past thirty or more years, been carried on in the Northern Illinois region. Its success should be watched with great care by our own biologists, especially the experts in wildlife management. The mosquito problem needs no description to our naturalists, nor is there any necessity to urge on them its seriousness. If there is any chance to ameliorate it through biological controls, so preferable to insecticides, it will be a welcome boon. The Illinois experiment could very well be an indicator of a method that might succeed in Southern Ontario as well as in Northern Illinois for the habitat conditions are quite comparable in most ways. We present here, therefore, an article on this subject which recently appeared in the Nature Bulletin (No. 182-A) of the Forest Preserve District of Cook County, Illinois. It is worth very serious consideration.

#### The Mosquitofish

In our forest preserves we have restored many marshes, both large and small, that had been drained or partially drained by former owners of the land. By blocking tile drains and building low dams at the natural outlets from valleys or low wet areas, we not only have restored old marshes but have created many new lakes, lagoons, ponds and sloughs.

Such areas soon become populated with aquatic plants and animals. Then they attract many kinds of wildlife that come there to drink, bathe, prey and feed, or build their homes. Such areas have life, beauty and interest the whole year round. We call them "Wildlife Oases". But they present one problem, important in a county of 4,500,000 people: mosquitoes.

Fortunately, the Chicago region has a fish immigrant from the southern states with which we control the mosquitoes that breed in such waters. It is the Mosquitofish, or Gambusia, one of the little topminnows or killifishes, and a near relative of the guppies, swordtails and moons--popular aquarium fishes also from warmer climates. Like them, and unlike the other native killifishes of the northern states, the young of the Gambusia are born alive. It is called the mosquitofish because, more than any other kind, it regularly feeds among trash and vegetation in shallow water and along shores where mosquitoes breed.

It was first successfully introduced into northern Illinois in 1923, when some of these fish were brought from a pond on the campus of Southern Illinois Normal University, at Carbondale, and placed in a garden pool in Winnetka, a north shore suburb of Chicago. Carbondale, over 300 miles south, is near the northern limit of the Gambusia's normal range.

In 1928 and 1929, more of these little fish from the Carbondale pond were placed in ponds on golf courses near Chicago by the DesPlaines Valley Mosquito Abatement District; but none survived in a winter. So, in 1933,

this organization obtained mosquitofish from the Winnetka pool and placed them in ponds in our forest preserves and elsewhere. Enough of these survived and multiplied so that these ponds have served as hatcheries for further distribution of this hardy "naturalized" northern strain, obtained by unique food fortune from one or more rare individual fish adapted to survive long winters beneath the ice. Since 1941, some of this same strain have been successfully planted in a variety of Michigan waters as far north as the Straits of Mackinac.

The two sexes of the mosquitofish are more strikingly different in size than any other native fish. The mature female is usually less than two inches long but she is twice as long and about ten times as heavy as the mature male. Females usually produce 3 or 4 broods in a season and an average of about 50 young per brood, but exceptionally large females may give birth to broods of 300 young. Apparently, mosquitofish do not often live longer than two years.

Mosquitoes lay little raft-like masses of eggs on the surface of water. These hatch out larvae which must come frequently to the surface to breathe. After they become pupae, the pupa dangles from the surface film of the water by a tube through which it breathes. Mosquitofish have upturned mouths, and they work along the surface, gobbling down mosquito eggs, larvae and pupae. In some waters these fish multiply until they not only effectively control mosquitoes but also serve as an important item of food for hook-and-line fish. It may develop that the introduction of *Gambusia* into waters of the "vacation regions" of the northern states may accomplish more, in two ways, to increase the pleasure of vacationists than many more expensive programs of fish management and of mosquitofish control.

Water plus *Gambusia* equals recreation minus mosquitoes.

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Another article from the same source, Nature Bulletin No. 176-A, concerns an animal that is much more common in Ontario than most naturalists realize because of its nocturnal habits. It is one that we all should be on the lookout for, remembering that hollow trees and old woodpecker holes are its favourite dwellings.

#### Flying Squirrels

Few people ever see a Flying Squirrel, although they are widely distributed throughout the wooded areas of the northern hemisphere and numerous in many localities. Unlike other squirrels, they sleep all day in their dens, coming out at dusk to feed and play during the night--less in winter than in summer. They spend more time in the trees and less on the ground than any other squirrel. Most distinctive, of course, is their ability to glide through the air.

Flying squirrels do not fly. On each side of the body is a loose elastic membrane or fold of skin, covered with fur and extending from the wrist of the foreleg to the ankle of the hind leg, with a delicate rod of cartilage, attached only to the wrist, at the edge. Another membrane fills the triangular space between the foreleg and the neck and side of the head. When the animal leaps outward from a tree, it spreads its legs so that, with the flaring membranes stretched between them, it appears almost square and flat in shape and sails diagonally downward in a long swooping glide. Its

long bushy tail, broad and flat, is used as a rudder and as a brake to make the short graceful swoop upward when it lands on another tree.

There are several kinds of flying squirrels including one that ranges across the Arctic Circle. Those common in the eastern half of the United States are smaller than elsewhere--about the size of a small rat--the tail making up almost half the total length of 9 inches or less. The flying squirrel in our central states may vary from tawny gray to pinkish cinnamon above, with white underparts. Its thick silky fur is as soft as velvet. Like other squirrels it has a blunt-faced head and small rounded ears, but the usual feature is a pair of great black eyes which enable it to see exceptionally well at night and probably make daylight distasteful. Like all tree dwellers, it has hand-like feet with long flexible toes and sharp strong claws. Apparently, the only sound it utters is a faint squeak.

Flying squirrels usually live in hollow trees or abandoned woodpecker holes, but they will build summer nests of leaves, and they occasionally take over an empty bird house near a residence, or find their way into an attic where they become a nuisance because, after dark, a flying squirrel becomes a frolicsome bundle of energy. In winter, 20 or 30 may band together in a single den. Returning to his cabin in spring, one forest ranger found the chimney plugged with leaves and shredded bark, another nest in the stove, and four nests in his mattress.

They feed mostly on seeds, tree buds, nuts, fruits and insects. One pair, that came every night to capture moths and beetles at a lighted window, were finally tamed and had their young indoors, although they came and went as they pleased. These two would eat meat, just as in the wild they may eat the eggs or young of birds. Owls are their chief enemies, although foxes and weasels sometimes catch them on the ground. They have from 2 to 6 young in a litter but observers differ as to whether they may have two or only one litter per year.

Virginia Moe, in Animal Inn, her fascinating book about the many and various animals at Trailside Museum in the Forest Preserve District, says that the young--born naked and blind--open their eyes and are well furred all over when they are about 3 weeks old. They grow swiftly after that. Miss Moe says they seem to sleep harder than most animals and when roused in the daytime their drooping eyelids give them the sleepest look ever seen on an animal's face. They also play harder than other animals but never tussle or quarrel with each other, even when feeding. As pets they are unrivalled: soft and sleek; sociable and sweet-tempered; mischievous and tirelessly playful at night.

The flying squirrel is the cherub of the animal kingdom.

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#### ANNOUNCEMENTS

Guided nature trips to far parts of the world have now become a fixed part of the naturalist's world. All nature magazines carry notices of some one or other of these nowadays. The most ambitious, however, that has yet come to my attention is the one which is being undertaken this summer under the leadership of Fred Bodsworth, President of the Federation of Ontario Naturalists and one-time President of the T.F.C.N., and Dr. Austin Cameron, curator of Vertebrate Zoology at McGill University.

The trip will cover the period, June 6 - July 22, and will include as its high points several days in Japan, a week in Kashmir, and extended stops in the Crimea, northern Lapland and the famous Dutch bird reserve at Texel. It is a completely organized trip so that the price, U.S. \$2565.00, is all-inclusive.

Those who are interested should direct enquiries to Fred Bodsworth, 294 Beech Avenue, Toronto 13 (OX 9-2127) or to the Treasure Tours Inc., Dominion Square Building, Montreal, Canada. A detailed descriptive brochure is available.

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One of the most rewarding trips in early April in this area is to the great waterfowl reserve at Oak Orchard Swamp, across the lake in New York. See directions for getting there in Pettingill, A Guide To Birdwatching, pp. 365-366. This is an easy one-day trip from Toronto. The flooded fields for miles in this area as well as the lake itself are ordinarily swarming with ducks, geese and swans.

R. M. Saunders,

Editor.