THE Blue Jay

VOL. XXI, No. 3 SASKATOON, SASK. SEPTEMBER, 1963

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Conversion from kodachrome by L. T. Carmichael

Published quarterly by
THE SASKATCHEWAN NATURAL HISTORY SOCIETY
REGINA, SASK.

BLUE JAY CHATTER

This year, 1963, may long be remembered in southern Saskatchewan and most parts of adjoining provinces as the year of frequent rains. In spite of local hail and flooding damage, farmers will have the satisfaction of producing the biggest crop in the history of the west. Naturalists, too, rejoice in a fruitful year; hillsides have remained green and some sloughs have begun to fill with water again.

I have found it a real pleasure to travel about the province this summer, for with the abundant plant growth everything seems to have prospered. It is a common sight driving out from Regina in the evening to see mice run across the road. Those who are not aware of insects, mice, and small forms of life will frequently notice a Short-eared Owl or a skunk or fox. Too often these animals are only seen as dead animals along our highways; on a recent trip to Saskatoon I saw two dead Red Fox along the road and the remains of several Striped Skunks. Young animals need time to learn about lights and the speed of cars. In Sherwood Municipality this year I watched a family of young Red Fox and once I came on a family of Badger. I think this Regina municipality is to be congratulated for its banning of firearms.

The traveller in our province sees considerable evidence of good conservation practice. On the way to the Summer Meeting we stopped in to see Harry Coulter and his ranch where he has consistently prevented the setting out of poison baits. The results of his sound conservation practices are obvious. In the provincial Cypress Hills Park protection is combined with much enjoyment of wildlife. Limited grazing allows for the development of a rich grass cover and we cannot help wondering why the effort is being made to change some of this into a forest.

On our way home from the Cypress Hills we went with Ruth and David Chandler to visit the Prairie Dogs and the Sage Grouse. Since these species occur only locally, we were concerned to find two men, sitting in a car, enjoying the "sport" of shooting at Prairie Dogs. I agree with the Chandlers that it would be a fine project for our society to buy this original site for a Prairie Dog Sanctuary.

We saw evidence elsewhere that there is lots of work to do for conservation. We found that the bogs at Prince Albert, owing to road building, ditching and city expansion, are slowly drying up, and their characteristic plants disappearing. When we did see *Pinguicula vulgaris* L., the butterwort which has been found nowhere else in Saskatchewan, we felt there were good reasons for trying to protect these bogs from further drainage. During the summer we heard of boys at camp, because of lack of knowledge and leadership, peeling the bark and causing the death of birch trees. We heard of people who still did not know that our hawks and owls are protected during the summer months.

We cannot all contribute to conservation in a spectacular way as ranchers with large holdings or governments may do, but we can help others to be more interested in, and more understanding of, nature. Any time we can influence a person who is ruining a tree, picking a rare flower, or in the name of sport getting rid of some bird or mammal, we have contributed something. We can also, of course, contribute financially to the **Blue Jay** or to other undertakings of our society.

Recently we had a handsome $200 bequest from a Regina member to go toward the purchase of land for a sanctuary. This has been added to our special conservation fund. The society has considered acquiring property for a Sandhill Crane Refuge and for a Prairie Dog Refuge; so far no definite project has been undertaken. We should like to have you write to us with suggestions as to how our society can best contribute to the cause of conservation. Where should we be spending our money on sanctuaries and how can we raise the money to operate them?

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Vol. XXI, No. 3 SEPTEMBER, 1963 Pages 85-128

TABLE OF CONTENTS

PROF. WILLIAM A. S. SARJEANT
674 UNIVERSITY DRIVE
SASKATOON, SASKATCHEWAN, CANADA

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By Two Canadian Trails in Late August

by the late **Dr. H. M. Speechly**

Reprinted from the **Country-side Monthly,** December, 1910

In Western Canada there are two kinds of trails which are full of interest to the field botanist who usually is some busy person engaged in strenuous work, but who does not disdain this glorious opportunity for observation as a "side-line" far more attractive than any other; for, of course, we have no professional field botanists on our trails. No, we Westerners are too materialistic to bother about "weeds." Thus it comes that locally the present writer is known more or less humorously as the "Canary and Weed Man." Content am I.

Let us take the trail that is newly-graded first, a trail that for the purpose of travel is torn straight out of the heart of the 99-foot road allowance, or public road, which actually or in theory runs parallel to, and outside of, each side of each section of land. This grade slopes gently from its centre 15 or 20 feet on either side to a shallow ditch in such a manner as to allow water to run off easily, but at the same time to permit vehicles, loaded or unloaded, to pass each other conveniently. Supposing such a graded trail to have been graded in the previous fall there will be provided a beautiful seed-bed of black loam for the growth of wild annuals and perennials during the next spring, which will flower luxuriantly for the next two summers at least. In late August, when driving along such prairie trails, I feel as if I were some minor potentate making a royal progress among friends, not subjects. Sunflowers are perhaps the tallest and most conspicuous, casting bright yellow glances all up and down their stout stems, which bow and bend most gracefully without any obsequious touch. And all about them wave plumes of golden-rod (*Solidago canadensis*), those stippled plumes of even brighter yellow which, in tier upon tier, top stout leafy stems of rougher type, supplying that frequent contrast in nature of delicate traceries associated with strong rough outlines. There is no lack of green background to all the colour supplied by the yellows and the purples, such as, the purples of the ever-present willow herbs, which mingle with golden-rod or sunflower all over this continent in August, whether in the forest, bush, or prairie. Stately among the green are the oraches, green even to their spiked clusters of small sessile flowers, waving broad leaves like elephantine ears in friendly salute to the admiring gaze. Pigweeds, indeed! No, sir, call them sonorously by their botanical name, *Chenopodium atriplex,* and there you have a name with something to suit their majestic appearance, which dwarfs the minor beauty of their cousins, the lamb's-quarters, whose pyramidal growth is nevertheless quite imposing sometimes. In and out of these flit the vesper sparrows at sunrise and again when the sun is getting low on the horizon.

Nodding amid this greenery are heads of both tame and wild oats; and even stray heads of No. 1 hard wheat stand in ornamental clumps at frequent intervals. Another fine touch of bright colour is supplied by the peculiar shade of purple—is it a purple or is it not nearer a French gray?—of the purple aster, which in the old land is so popularly known as the Michaelmas daisy. Alas, by Michaelmas some mean frost has usually destroyed these beauteous clumps which, like the smell of potato haulms touched by the frost, recall memories of the allotments by the village green, the old church tower, the door opening through the red brick wall, and the leaves of walnuts floating on to the tennis court and the lawn!

Sometimes these asters mingle in sheets with sunflowers and golden-rods away across the prairie; sometimes they alternate with the daisy fleabane along the trail suggesting the cool colouring of blue and white porcelain vases. Often, and quite in the background, the tall evening primrose droops gracefully, and now flowering almost at its highest point shows a much less significant bloom than those cultivated varieties also so common in old country gardens; but at this season its lower leaves are turning colour so as to supply that

attractive scarlet tinge which alone the painted cup (*Castilleja coccinea*) supplies in other parts of Manitoba and the West. Quite cypress-like are the false tansies (*Artemesia biennis*) which row upon row shoulder out all other growths by their rank, pushing pyramids, so aromatic and pungent to the scent when bruised by the wheels. How their strong stems tinkle against the axles! Here and there their cousins the fireweeds (*Erechtites*) are becoming hoary with age.

Now for a time we leave the taller herbs and drive through a sea of yellow gum weed (*Grindelia squarrosa*) whose buds are sticky and scented as if with furniture polish. Very brilliantly against these shine spikes of *Liatris scariosa,* the blazing star, whose bright purple-crimson knobs are not the least suggestive of any kind of star. A few spikes of the cool French-gray flower heads of the wild mint still rise above their dark green clumps and set off here and there the late bloom of a seedling wild rose. Ah me, how lovely is that bluish-pink or that red as red as blood! The older bushes of the prairie rose are now full of hips of a shining polished vermilion hue so attractive to our childish days when we nibbled off the sweet outer rind only to be irritated with the hairy seeds within.

The low marshy spots are crossed by small wooden culverts and bordered by lush banks of knotweed (*Polygonum persicaria*) bright with pink spikes of bloom. On drier spots a deceptive impression of frost catches the eye where the silverweed spreads its fern-like foliage, and here and there its later blooming cousin, *Potentilla gracilis,* sprawls in bushy fashion dotted with tiny yellow blooms. Among them all the ball mustard rears its elegant candelabra of seeds and the tumbling mustard prepares its mazy wheel. Was it this weed, in the West a noxious weed, which inspired the hot-blooded Psalmist to exclaim: "O, my God, make them like unto a wheel!"? Or even if you say it is better translated, "like the whirling dust," both are familiar phenomena to the Western settler. In the fall the tumbling mustard breaks its stem near the ground and like a crinoline let loose bowls across the unbroken prairie and the cultivated fields alike gradually dropping off its seeds; "the seeds as in many 'tumbling weeds' are not easily shed from the rough pods; consequently a head of this weed may blow about the prairie for the whole winter, dropping a few seeds at intervals for many miles." I make this quotation from the book on "Farm Weeds of Canada," published at the office of the Superintendent of Stationery, Government Printing Bureau, Ottawa, in order to let our readers know that such an admirable book exists. The letterpress is by the late Dr. Fletcher—the really great naturalist, everlamented by farmer and scientist alike—and by Mr. George H. Clarke, B.S.A.; but the excellent coloured illustrations are by Mr. Norman Criddle, of Aweme in Manitoba, a near neighbour of mine, as he lives only about 50 miles northwest of Pilot Mound. If we have a better all-round naturalist than Mr. Criddle in the Northwest, I have not heard of him yet. The book will cost you not more than five shillings, including postage, as the price is a dollar.

After this digression, just let us stop the horse and notice that, though it is a calm day and straw piles are altogether too precious this season to burn, all round the horizon are columns not of smoke but of whirling dust, which twist and twirl and progress for miles, now collapsing to the ground, now raising a canopy high in the air, so you Westerners can choose what translation of Psalms 83 and 13 you please.

At this time of the year the telephone poles are favourite perching places for young sparrow hawks as well as the offspring of the larger members of the hawk tribe; and to a casual glance, in colour quite like the surface of the trail, are the mourning doves which feed all along the road and fly off with the quick beating flight of the pigeon tribe.

Perhaps, however, my favourite trail in late August is that north trail which skirts Barbour's Lake and which though comfortably graded has not been despoiled of all its bush. Both in the late days of August and the first days of September this trail shows signs of the passing of summer and the coming of fall. On the tranquil bosom of the lake the ducks collect their fledglings safe from the gun. The nighthawks and the swal-

lows are all on the southward move. Like bright torches the ashes all too early flame yellow among the green poplars, and where clearings have been made the crimson flush of fading underbrush begins to burn. But it is north of the lake where the chief attraction lies for me. At this time of the year the alteration of clearings with untouched bush preserves the late flowers from blighting wind and frost, while the very openness of the clearings brings out most brightly the puce-purple of the dogwood clumps, the brilliant scarlets of the little cherry trees, the mingled crimsons, browns, yellows and green of the seedling oaks, the deep crimson of the highbush cranberry, and perhaps brightest of all, the fiery scarlet which paints tiny gooseberry bushes with unwonted splendour. Mixed wonderfuly with these are leaves of all sorts still green or beginning to yellow with age on poplars, Balm of Gilead, hazel and saskatoon. Here, too, the late asters join with tall sheaves of golden-rod to produce their lovely contrasts of purple. White asters also vie with here we find the handsome New England aster whose rays around a yellow disc are more crimson than purple. While asters also vie with the daisy fleabane in luxuriance. It is odd, however, that people long resident in Manitoba travel up and down that trail without ever noticing one of the chief beauties of its late flowering season.

After the middle of August only the watchful eye catches sight of that fine blue which is the chief glory of the gentian tribe. It is the closed or bottle gentian (G. *andrewsii*) which coyly peeps among the herbage showing now a light porcelain blue corolla tipped with white, tight closed except at the tip, whence peer the stamens or the stigma. Sometimes the blue approaches ultra-marine, at other times the colour is an intense violet-blue. Usually from five to seven flowers are crowded in a terminal cluster, but often lower down the stalk one or two additional clusters grow from the bases of the oval leaves, which sometimes are quite rusty. The fringed gentians, loving dry meadows and wayside places, do not frequent the damp places beloved by the closed gentian. Here the bumble bee finds its last feast of the season within these walls which allow it entry and probably it alone. Let me end by quoting Elaine Goodale's lines, which though written for the fringed gentian and for "down East" have some relation to our present theme:

Along the quiet road, winding slow,
When free October ranged its sylvan ways,
And, vaulting up the terraced steep elbow,
Chased laughing sunbeams through the golden days,
In matchless beauty, tender and serene,
The gentian reigned an undisputed queen.

Editor's Note: We are indebted to Thomas Heaslip, Loughries, County Down, North Ireland, for sending us the interesting description of prairie roadsides in autumn reprinted above. We are indebted to R. D. Symons, our conservation chairman, for the following information about Dr. Speechly which he obtained from the Public Press and from Dr. Speechly's daughter. Mr. Symons corresponded with Dr. Speechly in 1913, 1914, and 1915 and received much help and encouragement in his bird studies from Dr. Speechly.

Dr. H. M. SPEECHLY
1866-1951

Author of **By Two Canadian Trails in Late August**

Dr. H. M. Speechly was born in India in 1866 where his father was Bishop of Travancore. He was educated in England and received his professional training at London Hospital.

After practising in England, Dr. Speechly came to Canada in 1901 and settled in Pilot Mound, Manitoba. His garden there was a veritable park, illustrating what could be done to beautify property on the prairie. For years he kept official records of bird migration and became an acknowledged authority on natural history. His articles in **The Grain Growers' Guide** and **The Nor'-West Farmer** were widely read in the western provinces.

In 1916, Dr. Speechly went to England on overseas service, returning in 1919 to practise medicine in Winnipeg. In 1929, he was appointed Provincial Coroner which office he filled with distinction until his retire-

ment in 1942. Following this he served from 1942 to 1945 on the staff of the Muncipal Hospitals of Winnipeg. Dr. Speechly passed away on March 17, 1951.

Dr. Speechly was a moving spirit in the Manitoba Horticultural Association and was one of the founders of the Natural History Society and of the Manitoba Museum. For 25 years he and his associates worked tirelessly to convince the authorities and the general public that mosquito control was a practical and greatly needed health measure. When the 1950 flood threatened to endanger the health of the citizens, the mosquito abatement organization was ready to swing into action.

Dr. Speechly was a widely read man of tremendous energy and enthusiasm, an able speaker, interested in bettering conditions wherever he happened to be. All down the years, both Dr. and Mrs. Speechly were originators of new, practical ideas, far-seeing and interested in the welfare of the general public. More than that, they were prepared to follow up each new venture with sustained enthusiasm and sheer hard work.

In recognition of a life-time of voluntary service to the Province of Manitoba, the University of Manitoba honoured Dr. Speechly on May 14, 1943, by conferring on him the degree of LL.D. On October 15, 1947, the same honour was bestowed on Mrs. Speechly for her outstanding contributions in the fields of education and public welfare.

Self-guided Nature Trails Established in Cypress Hills Park

by **Douglas E. Wade**[1], Regina

Self-guided nature trails, whereon you can walk without personal guide, have been in use in North America since the 1920's. Such trails, an accepted part of interpretive programs of national parks, are rare in Canadian provincial parks. There are many varieties of "marked" nature trails ranging from those that simply label plants in season along a pathway to those that lead the viewer to an understanding of how nature works through its many inter-relationships. The latter style is much more difficult to construct.

Recently, three nature trails have been developed at Cypress Hills Provincial Park.[2] Two are "self-guided" nature trails and mimeographed "guide" information for each can be obtained at park headquarters. The other trail, perhaps unique in Canada, is a combined "nature and compass trail." To use it one must not only know something about natural history but also how to use a compass and make linear measurements up and down hill and on the level by pacing. A mimeographed set of instructions for this compass route is also available at park headquarters.

The compass trail, because it culminating point of interest is a group of old buffalo wallows, has been named "Plateau of the Buffalo Wallows." The other trails, each named after a distinctive feature, are "Valley of the Beavers" and "Valley of the Windfalls."

The "Valley of the Beavers" trail starts from the east end of the dam forming Loch Lomond and wends southward down the left bank of the Lone Pine Creek for about eight-tenths of a mile. It then crosses the creek by a low foot bridge immediately below and parallel to a 100-foot beaver dam. The trail then goes back up the valley along the right bank of the creek recrossing the creek by a foot bridge and back to the starting point. From near the Lone Pine Camp Ground, there is an auxiliary entrance route. The entire trail has 22 marked stations or points of interest. Each station (a numbered stub post) covers some characteristic actions and relationships of beavers to their environment.

Beaver workings and "signs" along the valley are very abundant. During early morning and late evening

hours it is quite possible—if one is quiet—to observe beavers in the several ponds. Opportunities for still and motion picture photography of beavers and other wildlife are excellent at many places along the valley. Many other kinds of wildlife can be sighted or discovered by "sign" in the valley.

The floral displays of the valley are vivid and constant throughout the growing season, from the pastel colors of early spring to the flaming golds of the aspen in the fall.

All wildlife, both plants and animals, are given full protection along the trail. This, of course, is a basic ground rule to insure the continued richness of the valley. For here is truly a beautiful valley. Once the scars of getting a trail and markers established have healed, it will be up to each individual user to abide by the simple ground rules and refrain from dropping litter along the trail.

The other self-guided nature trail in Cypress Park has been named "Valley of the Windfalls." This trail is only three-tenths of a mile from the main centre of activities of the park and stems off the Boiler Trail road winding through a valley and a lodgepole-pine upland for a total length of about eight-tenths of a mile. The valley contains large white spruce many of which have been blown over by high winds. Because of a high water table throughout the valley, the trees have very shallow roots. Although there is a criss-cross welter of downed trees here and there in the valley, the authorities have indicated there will be no clean-up work done. The scene, aside from keeping the trail free of debris and dangerous, leaning trees, will be kept as it is.

Many red squirrels inhabit Windfall Valley and white-tailed deer have been regularly spooked from the valley. Deer trails are frequent and the nature trail itself follows in part active "game" trails. At one station, you can see the claw marks of a bobcat on a small aspen and in another place, you can observe how buck deer have shredded the bark of willows while removing velvet from their antlers. There are 35 stub-post numbered stations along the "Valley of the Windfalls."

On each of the trails the walker will get some **identification, life history facts, ecology,** and perhaps some **applied ecology** (management).

A major concept underlying the establishment of these trails, which were laid out under the supervision of the Conservation Information Service of the Department of Natural Resources, is expressed in a recent definition of "conservation" by Arthur Carhart: **"Conservation is thought and action directed by man to protect, maintain and fortify the environmental complex that supports and enriches life as it now exists on the planet earth."**

The key to Mr. Carhart's definition lies in an understanding of the "environmental complex." These nature trails can bring a bit of understanding to the trail walker of what is meant by "environmental complex" and how important it is to save the environment that makes up the dwelling places for many kinds of wild plants and creatures.

The trails themselves lead you through areas of beauty and richness. There is, of course, always the danger that by establishing such trails this beauty and richness will ultimately be destroyed by those who refuse to observe a few simple protective ground rules. We hope that this will not happen in the Cypress Hills Park, for these three trails represent a pioneering effort in Saskatchewan's provincial parks.

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[1] Formerly Supervisor, Conservation Information Service, Department of Natural Resources, Mr. Wade resigned from this position July 12, 1963.

[2] The writer wishes to acknowledge the very considerable field assistance given by Mr. Peter Gregg of La Ronge, the aid of the Cypress Hills Park staff, the field work done voluntarily by his own son, Alan Wade, and friend Jim Sekulich, and the co-operation of Art Hartwell, Superintendent of Southern Region, Department of Natural Resources, who encouraged the project and expedited the establishing of the trails and the preparation of the signs.

Detergents–A New Hazard for Water Birds

by **Robert W. Nero,** Regina

Water birds face a vast array of natural hazards throughout their lives including weather factors, parasites, predators, and diseases. In addition, they are subject to mortality through several man-made hazards, such as floundering in oil slicks on lake and ocean, or through ingesting poisonous insecticides. Complex chemicals may be expected to have a variety of unforeseen effects on wildlife. "New organic chemical exotics such as detergents" have already attracted the attention of ornithologists in respect to the deleterious effects of detergents on aquatic plants and animal-food organisms used by birds (Ann. Report, Conservation Comm., Wilson Orn. Soc., **Wilson Bull.,** 74: 218). Ordinarily, detergents occur as pollutants in dilute form and their effect on birds is only indirect. However, we now have good evidence of a direct effect of this hazard, namely, the **wetting** of water birds as a result of encountering waste detergents in concentrated form.

Late in the evening of April 29, 1963, my wife and I discovered a flock of about two dozen Horned Grebes sitting on floating boards on a bank of the Regina city sewage lagoon. The birds appeared wet, cold, and dirty, and were obviously in some difficulty. The area of the lagoon in which we found the grebes had a thick scum on the surface of the water, evidently waste detergent, perhaps concentrated in this area by the wind; we surmised that the grebes had become immersed in detergent sometime during the previous 24 hours. They had evidently arrived as migrants during the previous night, since they had not been seen when we checked the area on April 28. We easily captured two of the exhausted grebes which were sitting up on the bank, and found them to be quite wet—an unusual condition for a water bird. There were also three dead grebes at the site, and it may be assumed that these had died of exhaustion and exposure. When a water bird loses its water-proofing it becomes wet, and for a grebe, which always takes flight with some effort, the excess weight of wet plumage may be a real handicap. Moreover, a wet bird is subject to chilling. This was a particularly cold and windy evening so we decided to attempt to "rescue" as many as possible; we had no doubt that the majority would have perished overnight. Accordingly, we returned after dark with Dot and Doug Wade, their son, Alan, Greg Keith, John Comrie, and David Newsome, and with the aid of flashlights were able to capture an additional 18 grebes, all of which were wet, cold, and clearly exhausted. They were found sitting chiefly on the bank in grass or weed cover, evidently attempting to avoid the chill wind.

In a delightful little book on caring for birds (**Bird Doctor.** 1963. Country Book Club, London. 162 pages) Miss Katherine Tottenham describes the nature of the "wet-feather" condition which plagued our grebes. She points out that detergents may be used effectively to remove fuel oil from birds which have suffered oiling, but the detergent also removes the natural coating of oil which is part of the waterproofing mechanism of the plumage of water birds. She also discusses the results of failure of the bird's oil gland in this respect, which renders the bird equally wettable. In order to maintain their plumage in a waterproof condition water birds need to be in a healthy condition and need to preen constantly their feathers, thus straightening the complex arrangement of the fine parts of the feathers, and also thus ensuring the anointing of the plumage with the natural oil from the oil gland.

We were interested to see how long it would take our grebes to recover their waterproofing, so we kept seven of them in captivity for some time afterwards. Our first concern was to remove the detergent and dirt from their feathers and get them warm. Upon reaching home, we put them in the bathtub in warm water. We were surprised to see how quickly they adjusted to their new and certainly unfamiliar surroundings, drinking, bathing, preening, scolding, and even deliberately swimming over to stand in ecstasy beneath a torrent of hot water from the tap! After a thorough

rinse in plain water we dried them and kept them near a hot-air register so that they would dry out thoroughly. From this time on we kept them in a small pen, indoors, putting them into the tub once a day in order that they might drink and preen. We fed them on raw cod and halibut, and occasionally gave them vitamin A-D capsules. They soon learned to eat the strips and chunks of fish which we offered them a few times daily; and they also soon learned to call when they were hungry. For the first few days, immersion in water at once wet them thoroughly, and they took a long time to dry. It was four days later before I recorded that they seemed slightly less wettable, and then mainly on the wings and head. On the seventh day they were still wettable, but definitely less so than previously. On the 10th day it was apparent that they were quite a lot more buoyant and drier while they were bathing, but they were still far from normal. By the 15th day two of three surviving grebes (three died between the second and fourth day, one on the 12th day) were in good feather condition, though quite thin. On the 16th day (May 4), the weakest was dead, but the remaining two were released into Wascana Lake: they kicked their heels and bathed and preened in obvious delight at being out in the sun and open air of their native environment. Thirteen of the other grebes maintained under similar conditions by Dot Wade fared slightly less well (imagine feeding 13 grebes!), only one surviving the 16-day period of captivity. (Evidence of simultaneous migration of both sexes was obtained from our dead grebes; of 15 which I dissected, 11 were males and four were females.)

Our experience suggests that it takes at least two weeks for captive grebes to recover any real degree of waterproofing (under the conditions described above). No doubt diet, access to sun and water, and exercise would have some effect on the rate of re-establishment of waterproofing. Miss Tottenham notes that an oiled guillemot which she washed and cared for, had only temporary buoyancy after a month. "Three months after her arrival Gilly was buoyant for nearly half an hour at a time . . ."

We checked the sewage lagoons as often as we could for indications of other marooned "wet-feather" cases. On May 7 we noted a dead adult Canada Goose floating amidst a mass of debris in a distant corner of the lagoon; it had clearly died in recent weeks, but we have no certain knowledge of the cause of its death. On May 9, however, we found four newly-arrived Western Grebes which were clearly suffering from wet-feather. A group of three were sitting up on the bank, wet and obviously tired. They moved slowly into the water only after we approached them on foot. It was apparent that they were having difficulty swimming and they returned to shore almost immediately. The fourth grebe was found sitting on shore on the other side of the lagoon and was captured by hand. This bird had a gray head when captured and when placed in a tub of warm water it had very wet feathers chiefly on the breast and sides. Apparently, the detergent had taken effect in a short period while the bird was swimming on the surface of the lagoon. Although this grebe was force-fed both fish and vitamin capsules, it died on May 11. I checked the sewage lagoon on June 21 and found the carcasses of six Western Grebes where the live birds had been seen on May 9. It is of some interest to recall that we found a dead Western Grebe on the lagoon on May 12 in the previous year (1962): "It was found dead on a small wooden raft which had floated to shore, on which a pile of clay pellets had been heaped into the semblance of a nest mound; a few sticks and grasses laid on top completed this odd structure. An autopsy revealed the bird had starved to death, which is not surprising as the lagoon contains no fish. What could induce the grebe to stay?" (F. Brazier, **Spring migration report for Regina district,** 1962. Sask. Mus. Nat. Hist. Mimeo, 18 pages). It now seems very likely that this was another wet-feather bird which had simply been unable to leave the lagoon.

There may well be additional victims of detergents at this lagoon, although we have no other records from the many days on which we visited the area. The lagoon attracts a variety of water birds—most species of ducks, Common Loon, and even White Pelican have been recorded on the lagoons (actually, two adjacent water bodies) at one

time or another. Presumably, the detergent is not always in sufficient quantity or concentration to "degrease" water birds, and perhaps most of those which do suffer somewhat are able to fly to clear waters, and can thus recover. An incredible amount of detergent foam blankets Wascana Creek for a considerable distance below the sewage lagoons, so it is feasible birds may suffer ill effects in the creek (for miles of its length) as well as in the lagoons. The total biological effect of this quantity of waste detergent flowing into our local streams may be more deleterious than we imagine. There have been newspaper accounts of recently developed chemicals which can be added at sewage treatment plants to alter detergents so that they can be broken down by bacteria (as is the case for ordinary soaps) and thus rendered harmless. We should perhaps bring this discovery to the attention of authorities concerned with waste disposal problems.

1963 RECORDS OF THE LAZULI BUNTING AND YELLOW-BREASTED CHAT

by **Dianne Fahselt,** Regina

On Saturday, June 1, 1963, while on a weekend camping expedition with the Regina Natural History Society at Estevan, Sharon Haggerty and I identified a male Lazuli Bunting in the camping area near Roche Percee. Mrs. Mayot of Moose Jaw also saw the bird. With George Ledingham in the Missouri Coteau near Claybank on July 6 another male Lazuli Bunting and possibly also a female were sighted. Since two male Lazuli Buntings were seen in approximately the same area in 1962 by a party on July 20 (Getting to know our less common birds, by M. Belcher and M. Rever, **Blue Jay** 20: 146-150), it is likely that these birds nest regularly in this part of the Missouri Coteau. E. M. Callin's 1960 record of a Lazuli Bunting at Fort San (**Blue Jay** 18: 120) emphasizes how rare the bird is in that area. Other reports and nest records of Lazuli Buntings may be found through reference to the **Blue Jay Index.**

In the camp grounds near Roche Percee, Sunday, June 2, 1963, Sharon Haggerty and I observed a Yellow-breasted Chat for some time as it flew from the top of one bush to the next, often "snapping" its tail in flight. Later we were not able to show the bird to Connie Pratt and Sylvia Harrison but they heard the song. Ross Lein of Estevan regards both the Yellow-breasted Chat and the Lazuli Bunting as possibly regular (but not common) nesting species in the Estevan area.

On July 1, I saw a Chat on two occasions along the South Saskatchewan River. At the old Empress ferry on July 12, my brother, Norman, and I sighted a Yellow-breasted Chat and George Ledingham heard it. The next morning, July 13, George Ledingham and I saw another chat along the river bank east of Cabri. Frank Brazier reported a pair with young in Boggy Creek Valley as recently as July, 1960, and a pair was found breeding at Fort San in 1955, but reports of the Yellow-breasted Chat in Saskatchewan are not numerous.

These sightings of the Lazuli Bunting and the Yellow-breasted Chat are interesting because they seem to indicate the northern limit of the ranges of both birds.

RED-HEADED WOODPECKER IN CYPRESS HILLS

by **R. V. Folker,** Saskatoon

On June 20, 1963, while travelling through the centre block of the Cypress Hills, Saskatchewan, we noted an adult Red-headed Woodpecker (*Melanerpes erythrocephalus*) as it landed on a fence post ahead of the car. With its striking pattern consisting of a completely red head, black body and wings showing large white patches, the bird was identified almost immediately by Bob Caldwell and myself.

Caldwell and myself, and then J. Nelson and J. Donovan, who were following in a second car, were able to approach quite close to this bird and obtained good views of it. The Red-headed Woodpecker is seen sporadically in the Cypress Hills region and Godfrey (1950, Birds of the Cypress Hills and Flotten Lake Regions, Sask., Nat. Mus. Canada, Bull. No. 120) lists several sight records for it as well as evidence that it may nest in this area.

Banding Golden Eagles Along The South Saskatchewan River – A Picture Story

Photos by **Hans Dommasch.** (Text by **Mary Houston**)

Typical coteau country along the South Saskatchewan River, where Golden Eagles nest.

Where the South Saskatchewan River cuts through the Missouri Coteau for some 60 miles between the ferry at Riverhurst and the Saskatchewan Landing bridge, rugged river "breaks" extend for several miles back from the river and offer suitable habitat for nesting Golden Eagles. Since there are only a few areas in Saskatchewan where Golden Eagles nest, this rough terrain attracts the bird bander. With an intrepid climber to scale the cliffs along the river or the coulees running to it, nests can be approached and the young eagles banded before they are old enough to fly.

We first learned of Golden Eagles nesting in the Beechy area when Dave Santy, an old timer of the district, wrote a short item about them in the **Blue Jay** (16:151-152). Actually, ever since arriving in the Beechy district about 1910, Mr. Santy had found or known of active eyries of the Golden Eagle every year. In the **Blue Jay** item Santy described his most recent visit to an eagle's eyrie on June 29, 1958, with Frank Roy.

My husband and I first visited the area with Dave Santy on June 21, 1959, but our 840-mile weekend trip was a disappointment. The single eaglet was dead in the nest, apparently having died from starvation when the parents deserted the nest after being kept under too constant observation by an eastern photographer in the days preceding our visit.

On June 24, 1960, we again visited the area with Mr. Santy and two young eagles were banded. Later that year, the two young from this

Dave Santy anchors the rope for the climb down the steep cliff.

Stuart Houston, having descended the rope, bands the young eagle. Remains of the eagle's rabbit dinner can be seen at the nest.

nest were seen by Mr. Santy foraging up and down the valley.

In 1961, three nests were visited: on June 27 one bird was banded in a nest located by Ralph Carson; on June 28 Mr. Santy took us to two nests, one of these at the site of the 1960 nest and having two young, the other in a new location with one young. No eagles were banded in 1962 when we were away from Saskatchewan in late June.

This year Mr. Santy located three eagle nests which we visited on July 1. One of these was the old site visited twice previously. Accompanied by Mr. Santy and his grandson, Stanley Peters, who had taken part in each of the previous climbs, Scout Commissioner Doug Redley, and Pete Perrin with his 4-wheel drive truck, the expedition braved impassable country roads to band four eagles in the three nests. One of the nests had been washed down from the cliff, and one young was dead in it, as a result of the heavy June rains.

The topography of this country will be altered by the flooding of the valley to create the South Saskatchewan reservoir, but we hope that sufficient rough terrain will be preserved above to provide nest sites for Golden Eagles.

The young eagle wearing its band.

Co-operative Spring

Compiled by
DOROTHY WADE
Regina

	ARABELLA S. Zgzelenchuk and E. Kozak	BLADWORTH Lawrence Beckie	CARROT RIVER Paul V. Fowler	DILKE J. B. Belcher	FORT SAN E. M. Callin	GRENFELL Mrs. J. Hubbard	HAZELCLIFFE J. M. Provick
Whistling Swan		Ap15	My 2		Ap 9	Ap23	Ap22
Canada Goose	Mr29	Mr28	Ap 5	Mr28	Mr23	Ap14	Mr28
Mallard	Mr28	Mr28	Ap 3		Mr28	Ap 1	Ap 7
Pintail	Ap 6	Mr28	Ap 3	Mr28	Mr24	Mr31	Mr31
Marsh Hawk	Ap 1	Mr21	Ap 9	Mr22	Mr24	Ap 5	Mr25
Killdeer	Mr30	Mr30	Ap10	Mr27	Ap 5	Ap20	Mr28
Common Snipe	Ap25	My 4	My 1				
Mourning Dove	My10	My16	My 1	My 9	Ap23	Ap21	Ap16
Common Nighthawk	My27	My25	Jn 3	My26		Jn 1	
Ruby-throated Hummingbird	My29				Jn 1	My26	My26
Yellow-shafted Flicker	Ap10	Ap13	Ap10	Ap18	Ap13	Ap10	Ap 7
Eastern Kingbird		My16	Jn 2	My15	My18	My17	Ap 7
Eastern Phoebe	Ap23					My 5	Ap29
Barn Swallow	My 5	My 8	My14	My 5	My 3	My 7	My 4
Purple Martin						My16	
Common Crow	Mr25	Mr21	Mr20	Mr19	Mr16	Mr15	Mr22
House Wren	My22	My29	My15		My11	My27	
Catbird			My17		My 9	My27	
Brown Thrasher		My15		My31	My14	My18	My25
Red-eyed Vireo			My20				
Tennessee Warbler		My20	My14				
Yellow Warbler		My17		My15	My10	My 8	My24
Myrtle Warbler	My 8	My 4	My13		My 6	My 8	
Blackpoll Warbler				My22	Jn 2	My18	
Ovenbird					Jn 2		
American Redstart					Jn 2		
Redwinged Blackbird	Ap30	Ap 6	Ap17		Ap 5	Ap 5	Ap 8
Baltimore Oriole		My15	My22	My21	My11	My23	Ap12
Rose-breasted Grosbeak							
American Goldfinch		My22	My27			My26	My27
Slate-colored Junco	Mr29	Mr31	Ap10		Ap 5	Mr30	Ap 2
Chipping Sparrow		My 5	Ap17		My 1	My 9	
White-crowned Sparrow	My 6	Ap27	My 2	Ap27	My 5	Ap26	
White-throated Sparrow	My 6	My 4		Ap27	My 4	Ap26	

Migration Study, 1963

Compiled by
DOROTHY WADE
Regina

	KELVINGTON Steve Waycheshen	KINLOCH Mrs. H. Rodenberg	LADY LAKE Donald Buckle	LEADER Daisy D. Myers	MASEFIELD J. David Chandler	MOOSE JAW M. J. Nat. Hist. So.	NAICAM W. Yanchinski
Whistling Swan		My18				Ap 7	
Canada Goose	Mr28	Mr31	Ap12	Mr13	Mr22	Mr21	Ap 5
Mallard	Ap 6	Mr31	Ap10		Mr22	Mr22	Mr27
Pintail	Ap 6	Ap 9	Ap20		Mr22	Mr22	Ap 7
Marsh Hawk	Mr29	Ap16			Mr24	Mr24	Mr25
Killdeer	Mr30	Ap 9	Ap 6	Ap15	Mr21	Mr31	Mr29
Common Snipe		Ap 8					My 5
Mourning Dove	Ap17	My15		Ap17	My21	Ap16	Ap25
Common Nighthawk						My26	
Ruby-throated Hummingbird	My16		My29				
Yellow-shafted Flicker	Ap 7	Ap20	Ap15	Ap17			Ap10
Eastern Kingbird	My20	My24	Ap17	My 9		My15	My24
Eastern Phoebe	My 1	Ap20					Ap26
Barn Swallow	My 7	My 6	My15				My 7
Purple Martin	Ap28	My 6				My 8	
Common Crow	Mr20	Mr25	Mr25	Mr24	Mr23	Mr17	Mr23
House Wren	Ap28	My20	My11			My21	My18
Catbird	My19	My28				My26	My30
Brown Thrasher			My15			My12	Jn 2
Red-eyed Vireo	My24					My26	My15
Tennessee Warbler						My18	
Yellow Warbler	My31					My11	My16
Myrtle Warbler		My 8	My 7			My 1	My26
Blackpoll Warbler						My11	
Ovenbird	My20						
American Redstart	My26					My20	My17
Redwinged Blackbird	Ap 7	Ap20	Ap10		Mr30	Mr24	Ap 9
Baltimore Oriole	My16	My21				My10	My16
Rose-breasted Grosbeak	My15	My24	My16		Jn10	My25	My20
American Goldfinch	My27		Jn 1			My14	Jn 2
Slate-colored Junco	Mr24	Ap 1	Mr31	Ap16	Mr30	Mr15	Mr30
Chipping Sparrow	My 5	Ap12	Ap11			My 9	
White-crowned Sparrow		Ap20				Ap23	
White-throated Sparrow	My 2	Ap20	Ap28			Ap28	Ap29

Co-operative Spring

Compiled by
DOROTHY WADE
Regina

	PUNNICHY Ronald H. Hooper	REGINA R. Nat. Hist. So.	SASKATOON S. Nat. Hit. So.	SHAUNAVON Mrs. W. J. Shirley	SHEHO William Niven	SOVEREIGN Mrs. G. Winny	SPIRIT LAKE William Anaka
Whistling Swan		Mr29	Ap 9		Mr25	Ap 9	Ap15
Canada Goose	Mr30		Mr31	Mr14	Mr21	Mr27	Mr22
Mallard	Mr31		Mr30	Mr23	Mr28	Ap 6	Mr28
Pintail	Ap 6	Mr18	Mr30	Mr23	Mr28	Ap 8	Mr31
Marsh Hawk	Mr25	Mr19	Mr23	Mr31	Mr22	Ap 6	Mr21
Killdeer	Ap 9	Mr23	Mr29	Ap 9	Mr31	Ap10	Mr31
Common Snipe	Ap21	Ap18	My 4	My 3	Ap21	Ap18	Ap15
Mourning Dove	Ap21	Ap13	Ap12	My14	Ap18	My19	Ap26
Common Nighthawk		My26	My28		My17	My26	My17
Ruby-throated Hummingbird	My31				My24		Jn 1
Yellow-shafted Flicker	Ap12	Ap 5	Ap13		Ap10	Ap21	Ap 7
Eastern Kingbird	My24	My11	My18	My23	My10	My25	My17
Eastern Phoebe	Ap23	Ap13			Ap28	My 8	Ap13
Barn Swallow	My 3	My 1	My 4	My15	Ap28	My20	Ap30
Purple Martin		Ap23	My 4		My 7		
Common Crow	Mr24	Mr13	Mr20	Mr23	Mr22	Mr23	Mr21
House Wren	My11	My11	My18		My11	My16	My10
Catbird	My11	My21	My18		My14	My14	My25
Brown Thrasher	My17	Ap28	My12		My10	My18	
Red-eyed Vireo	My28	My25	My26		My23		My24
Tennessee Warbler		My 5	My18		My 8	My19	My15
Yellow Warbler	My10	My 6	My12		My 8	My25	My19
Myrtle Warbler		Ap17	Ap22		My 8	My 4	Ap21
Blackpoll Warbler		My 4	My18				
Ovenbird		My11	My25				
American Redstart		My15	My18			My15	
Redwinged Blackbird	Ap 7	Mr29	Mr30	Ap13	Ap 6	Ap12	Ap 7
Baltimore Oriole	My24	My 8	My12		My11	My18	My16
Rose-breasted Grosbeak		My12	My18		My15	My 8	My25
American Goldfinch	My27	My15	My19	My27	My19	My23	My25
Slate-colored Junco	Mr29	Mr23	Mr30		Mr27	Mr29	My25
Chipping Sparrow	My 4	Ap27	My 9		My 9	Ap26	
White-crowned Sparrow		Ap25	Ap27	Ap29	My 6	Ap26	
White-throated Sparrow	My 8	Ap26	Ap28		My 4	My 5	Ap27

Migration Study, 1963

Compiled by
DOROTHY WADE
Regina

	STORNOWAY S. & R. Zazelenchuk	TOGO W. J. KRUPP	TREGARVA Kenneth Dickson	TULLIS Mrs. E. Boon	THORSBY, ALTA. Mrs. P. Haller	MARGARET, MAN. Ernest J. White	
Whistling Swan	My 1		Mr28	Mr26	Ap14	Ap 8	
Canada Goose	Mr28	Mr27	Mr28	Mr27	Mr28	Mr31	
Mallard	Mr28	Ap 7	Mr28	Mr26	Mr27	Mr31	
Pintail	Mr27	Ap13	Mr29	Mr26	Ap13	Mr28	
Marsh Hawk	Mr22	Ap 7	Mr23	Mr26	My20	Mr21	
Killdeer	Ap 7	Ap 6	Mr22	Ap 6	Mr23	Mr31	
Common Snipe	Ap29		Ap15				
Mourning Dove	Ap17	My 4	Ap14			Ap 4	
Common Nighthawk					My22	My29	
Ruby-throated Hummingbird		My27				My26	
Yellow-shafted Flicker	Ap 9	Ap22	Ap 6		Ap19	Ap11	
Eastern Kingbird			My14	My22		My16	
Eastern Phoebe	Ap 9	My 5	My 3				
Barn Swallow	Ap27	My 5	My 7	My12	My21	My 9	
Purple Martin		My 5				My 3	
Common Crow	Mr22	Mr20	Mr18	Mr21	Mr27	Mr16	
House Wren		My18	My25		My 8	My12	
Catbird	My16	My28	My26			My25	
Brown Thrasher	My11		My18			My12	
Red-eyed Vireo			My29				
Tennessee Warbler							
Yellow Warbler		My26	My18			My16	
Myrtle Warbler	My 8		My 8				
Blackpoll Warbler			My11				
Ovenbird							
American Redstart						Jn 2	
Redwinged Blackbird	Ap 1	Ap 7	Mr23	Ap 4	My10	Mr29	
Baltimore Oriole	My12	My20	My25		My13	My17	
Rose-breasted Grosbeak		My26			My15	My13	
American Goldfinch		My23	Jn 2			My24	
Slate-colored Junco	Mr31	Ap 1	Mr27		Ap 7	Mr29	
Chipping Sparrow		Ap13				Ap 1	
White-crowned Sparrow	Ap30	Ap19	Ap26	My15	My21	My 2	
White-throated Sparrow	Ap30	Ap21	My 8			Ap28	

Seventh Annual May Day Bird Count

Saskatoon Natural History Society — May 18, 1963

Saturday, May 18, 25 observers in 5 groups uncovered 137 species of birds within the Saskatoon study area, a square block consisting of 100 townships (3,600 square miles) centered on Saskatoon. In last year's count, the first made in the extended study area, 127 species were identified. The day was cloudy with frequent showers; a north-west wind blew from 15 to 20 miles per hour. The temperature ranged from 45° to 54°. Highlights of the day included the sighting of a Mockingbird and the addition of two new species to the Saskatoon list: the Surf Scoter and the Golden-crowned Sparrow. (These records will be written up in the **Blue Jay** at the end of the year.)

SPECIES LIST: Red-necked Grebe, Horned Grebe, Eared Grebe, Western Grebe, Pied-billed Grebe, Great Blue Heron, Canada Goose (Pike Lake), Mallard, Gadwall, Pintail, Green-winged Teal, Blue-winged Teal, American Widgeon, Shoveler, Redhead, Ring-necked Duck (Pike L.), Canvasback, Lesser Scaup, Common Goldeneye, Bufflehead, White-winged Scoter (Pike L.), Surf Scoter (Rice Lake), Ruddy Duck, Red-breasted Merganser (Rice Lake), Red-tailed Hawk, Swainson's Hawk, Marsh Hawk, Pigeon Hawk (S.E.), Sparrow Hawk, Ruffed Grouse, Sharp-tailed Grouse, Ring-necked Pheasant, Gray Partridge, Sandhill Crane, Sora, American Coot, Semipalmated Plover, Killdeer, Golden Plover, Black-bellied Plover, Ruddy Turnstone, Common Snipe, Upland Plover, Spotted Sandpiper, Solitary Sandpiper, Willet, Greater Yellowlegs, Lesser Yellowlegs, Pectoral Sandpiper, Dowitcher, Stilt Sandpiper, Marbled Godwit, American Avocet, Wilson's Phalarope, Northern Phalarope, California Gull, Ring-billed Gull, Franklin's Gull, Bonaparte's Gull (Pike L. - 2), Common Tern, Black Tern, Rock Dove, Mourning Dove, Great Horned Owl (2 nests), Snowy Owl (S.W.), Belted Kingfisher, Yellow-shafted Flicker, Yellow-bellied Sapsucker, Hairy Woodpecker, Downy Woodpecker, Eastern Kingbird, Western Kingbird, Eastern Phoebe, Say's Phoebe, Least Flycatcher, Western Wood Pewee, Horned Lark, Tree Swallow, Bank Swallow, Barn Swallow, Cliff Swallow, Black-billed Magpie, Common Crow, Black-capped Chickadee, House Wren, Long-billed Marsh Wren, Mockingbird (S.E.), Catbird, Brown Thrasher, Robin, Swainson's Thrush, Gray-cheeked Thrush, Veery, Mountain Bluebird, Ruby-crowned Kinglet, Sprague's Pipit, Loggerhead Shrike, Starling, Warbling Vireo, Black-and-white Warbler, Tennessee Warbler, Orange-crowned Warbler, Yellow Warbler, Magnolia Warbler, Myrtle Warbler, Blackpoll Warbler, Palm Warbler, Northern Waterthrush, Yellowthroat, Wilson's Warbler, American Redstart, House Sparrow, Bobolink (S.W.), Western Meadowlark, Yellow-headed Blackbird, Red-winged Blackbird, Baltimore Oriole, Brewer's Blackbird, Common Grackle, Brown-headed Cowbird, Rose-breasted Grosbeak, Purple Finch, Rufous-sided Towhee, Savannah Sparrow, Leconte's Sparrow, Vesper Sparrow, Lark Sparrow (S.E.), Chipping Sparrow, Clay-coloured Sparrow, White-crowned Sparrow, Golden-crowned Sparrow (San.), White-throated Sparrow, Fox Sparrow, Lincoln's Sparrow, Song Sparrow, Lapland Longspur, Snow Bunting.

Compiler: **Frank Roy.**

Third Annual May Day Bird Count

Regina Natural History Society — May 18, 1963

The 1963 Spring Census for the Regina area was scheduled for May 12, to allow comparison with counts of the two previous years (May 13, 1961, and May 12, 1962). However, because of rain and impassable country roads, the count was postponed until May 18. On May 18 there was again intermittent rain, but 21 observers in 8 parties spent the day in the field. An effort was made to count the total number of birds of each species seen, but these numbers cannot, of course, be regarded as a complete census of birds in the area. During the day, 140 species were seen, compared with 143 species on May 12, 1962, and 131 on May 13, 1961. Of the 140 species seen, 18 had not previously been recorded on the Regina spring census.

SPECIES LIST: (figures in brackets indicate numbers counted May 12, 1962): Horned Grebe 24 (70); Eared Grebe 47 (53); Western Grebe 37 (54); Pied-billed Grebe 7 (3); White Pelican 4 (0); Great Blue Heron 5 (6); Black-crowned Night Heron 5 (7); Mute Swan 14 (3); Whistling Swan 7 (1); Canada Goose 375 (191); Mallard 182 (340); Gadwall 47 (49); Pintail 39 (150); Green-winged Teal 10 (17); Blue-winged Teal 221 (100); American Widgeon 146 (140); Shoveler 112 (84); Redhead 28 (30); Canvasback 96 (50); Lesser Scaup 164 (200); Common Goldeneye 3 (0); Bufflehead 6 (3); Ruddy Duck 38 (80); Red-tailed Hawk 2 (10); Swainson's Hawk 8 (16); Rough-legged Hawk 1 (6); Bald Eagle 1 (0); Marsh Hawk 9 (32); Sharp-tailed Grouse 10 (1); Ring-necked Pheasant 4 (4); Gray Partridge 1 (9); Sora 15 (3); American Coot 683 (400); Killdeer 104 (150); American Golden Plover 1 (8); Black-bellied Plover 5 (1); Ruddy Turnstone 1 (0); Common Snipe 1 (5); Upland Plover 14 (0); Spotted Sandpiper 47 (13); Solitary Sandpiper 3 (2); Willet 40 (79); Pectoral Sandpiper 172 (7); White-rumped Sandpiper 1 (0); Baird's Sandpiper 83 (10); Least Sandpiper 17 (8); Short-billed Dowitcher 4 (0); Stilt Sandpiper 5 (13); Semi-

palmated Sandpiper 25 (0); Buff-breasted Sandpiper 5 (0); Marbled Godwit 16 (61); Hudsonian Godwit 1 (0); Sanderling 4 (14); American Avocet 36 (35); Wilson's Phalarope 46 (47); Northern Phalarope 6 (2); Ring-billed Gull 96 (100); Franklin's Gull 46 (270); Forster's Tern 1 (1); Common Tern 57 (21); Black Tern 728 (118); Rock Dove 48 (100); Mourning Dove 48 (66); Great Horned Owl 8 (7); Burrowing Owl 2 (11); Long-eared Owl 2 (0); Common Nighthawk 1 (0); Belted Kingfisher 5 (1); Yellow-shafted Flicker 15 (13); Eastern Kingbird 25 (5); Western Kingbird 25 (0); Eastern Phoebe 1 (2); Say's Phoebe 1 (7); Yellow-bellied Flycatcher 2 (0); Traill's Flycatcher 1 (1); Least Flycatcher 62 (22); Western Wood Pewee 2 (1); Olive-sided Flycatcher 2 (0); Horned Lark 144 (250); Tree Swallow 308 (97); Bank Swallow 328 (23); Rough-winged Swallow 9 (1); Barn Swallow 82 (127); Cliff Swallow 14 (0); Purple Martin 73 (37)! Black-billed Magpie 36 (21); Common Crow 86 (250); Red-breasted Nuthatch 2 (4); House Wren 8 (3); Long-billed Marsh Wren 2 (1); Brown Thrasher 28 (12); Robin 121 (172); Swainson's Thrush 115 (400); Gray-cheeked Thrush 46 (30); Veery 6 (1); Mountain Bluebird 3 (0); Water Pipit 13 (1); Sprague's Pipit 6 (5); Loggerhead Shrike 13 (25); Starling 26 (21); Warbling Vireo 1 (0); Black-and-white Warbler 2 (2); Tennessee Warbler 18 (0); Orange-crowned Warbler 10 (44); Yellow Warbler 43 (46); Myrtle Warbler 68 (60); Audubon's Warbler 1 (1); Blackpoll Warbler 16 (12); Palm Warbler 3 (4); Northern Waterthrush 6 (14); Yellowthroat 8 (1); Wilson's Warbler 1 (0); American Redstart 1 (0); House Sparrow 391 (1250); Bobolink 1 (0); Western Meadowlark 207 (202); Yellow-headed Blackbird 235 (1350); Red-winged Blackbird 768 (700); Baltimore Oriole 8 (6); Brewer's Blackbird 247 (275); Common Grackle 103 (175); Brown-headed Cowbird 90 (45); Rose-breasted Grosbeak 5 (3); Pine Siskin 17 (0); American Goldfinch 7 (0); Rufous-sided Towhee 4 (6); Savannah Sparrow 27 (50); Baird's Sparrow 1 (17); Vesper Sparrow 22 (31); Lark Sparrow 12 (1); Chipping Sparrow 110 (19); Clay-colored Sparrow 541 (58); Harris' Sparrow 5 (70); White-crowned Sparrow 17 (275); White-throated Sparrow 16 (75); Lincoln's Sparrow 53 (100); Song Sparrow 30 (21); McCown's Longspur 9 (5); Lapland Longspur 930 (45000); Chestnut-collared Longspur 36 (142). Compiler: **Frank Brazier.**

First Annual May Day Bird Count

Moose Jaw Natural History Society — May 26, 1963

The weather was not very auspicious for our first count. At 7 a.m. when the first group started out, the temperature was only 37° and it was foggy. The sky was overcast till about 3 p.m. and scattered clouds remained even after that time. The high temperature of the day was 59° which wasn't reached till about 4 or 5 p.m. The day was calm with the wind reaching a maximum of 13 miles per hour. The first group was out from 7 a.m. till about 10.30 a.m. A second party went out from 1 to 7:30 p.m. 58 species were seen by the 12 observers as follows:

SPECIES LIST: Horned Grebe, 3; Great Blue Heron, 2; Mallard, 44; Pintail, 2; Blue-winged Teal, 4; Swainson's Hawk, 1; Marsh Hawk, 1; Ring-necked Pheasant, 15; Gray Partridge, 4; Killdeer, 7; Least Sandpiper, 1; Ring-billed Gull, 116; Common Tern, 41; Rock Dove, 15; Mourning Dove, 11; Common Nighthawk, 4; Belted Kingfisher, 5; Yellow-shafted Flicker, 8; Eastern Kingbird, 27; Western Kingbird, 26; Least Flycatcher, 44; Olive-sided Flycatcher, 1; Horned Lark, 25; Tree Swallow, 10; Bank Swallow, 15; Rough-winged Swallow, 4; Barn Swallow, 5; Black-billed Magpie, 13; Common Crow, 27; House Wren, 11; Catbird, 3; Brown Thrasher, 11; Robin, 64; Hermit Thrush, 1; Swainson's Thrush, 8; Cedar Waxwing, 60; Starling, 11; Red-eyed Vireo, 15; Warbling Vireo, 10; Orange-crowned Warbler, 1; Yellow Warbler, 48; Blackpoll Warbler, 6; House Sparrow, 48; Western Meadowlark, 29; Red-winged Blackbird, 115; Baltimore Oriole, 32; Brewer's Blackbird, 45; Common Grackle, 25; Brown-headed Cowbird, 37; Rose-breasted Grosbeak, 1; American Goldfinch, 47; Lark Bunting, 49; Savannah Sparrow, 11; Vesper Sparrow, 8; Chipping Sparrow, 4; Clay-colored Sparrow, 34; Song Sparrow, 10; Chestnut-collared Longspur, 5. Compiler: **Mrs. F. B. Taylor.**

FAR TRAVELS OF TEAL BROOD

by **C. Stuart Houston**

If anyone needed convincing that a bird bander's accomplishments are dependent largely on the efforts of other people, he should have observed the spectacle at Upper Rousay Lake on August 1, 1958. Mary Houston waded knee deep into the muck of a shallow pond to scare a brood of ten Blue-winged Teal to shore, whereupon Margaret Belcher, Stan Houston and Maurice, Bonnie and Janice Street proceeded to "run down" and catch the ten young. Maurice sprinted nearly 100 yards over the short grass before catching the final bird, nearly able to fly.

These ten Blue-winged Teal resulted in a remarkably fine series of recoveries (for a species that has yielded only 4.8% recoveries from the 1491 banded). The first was shot near McGregor, Minnesota, on Oct. 4, 1958, and the second near La Gorgona, Valle, Colombia, South America, on November 23, 1958. Another visitor to South America was shot at Tastus, Venezuela, in the 1962 hunting season. The final report was of one shot at Lake Ariguanabo, Bauta, Cuba, southwest of Havana, on December 7, 1962.

Yellowthroat Versus Leconte's Sparrows

by **R. D. Symons,** Silton

The nesting season of 1963 has been full of surprises, due, I suppose, to prolonged early rains and cold weather, followed by an unprecedented number of heavy thunder showers. The result has been sudden and unexpected floodings. Here at Silton nearly all the first nests of grass birds, shore birds and ducks were rendered untenable and, as later events have proved, the damage was almost as great to second nests. Also, the force of the later storms blew down many already sodden nests from trees, bushes and banks.

The unusual incident I shall now tell can undoubtedly be put down to these conditions.

One of the most interesting places in this area is the valley of the Arm River just north of Findlater. Here, on the ranch of J. Edwards and sons are wide hay meadows with occasional spring-fed swamps. To this spot my wife and I went on June 12th of this year. This particular spring-fed swamp has its counterpart of many similar ones in various valleys, notably north of Jackfish Lake. The ground is boggy, with tussocks of coarse grass, some patches of tall slough grass, and many oozy runways and pools fringed with Baltic rush. There are scattered clumps of pussy willow, their green contrasting with the silvery hue of the swamp-loving hoary willow (*Salix candida*). This forms a typical habitat for Yellowthroats, rails and phalaropes. The latter grunted softly as they took wing at our approach. Overhead Common Snipes were "winnowing."

On the hay flats beyond Bobolinks fluttered and sang; and both Marbled Godwits and Willets clamored their uneasiness at our approach.

We found the water much higher than usual. The day was cloudy and cold with occasional showers between intervals of hot sunshine.

Very soon we became aware of sodden and abandoned ducks' nests, mostly of Blue-winged Teal; then we stumbled over a Sora's nest quite flooded. In most cases these nests had been robbed and their linings torn up. Even as we explored, a pair of magpies were diligently quartering the area, and we supposed these birds to be the ones responsible. At one point a number of stained and rotten goose eggs floated placidly in the muck. These proved to be from a nest of Edwards' tame geese which had chosen to "steal" their nest in the swamp. Proceeding warily to avoid the deep runways we reached the centre of the swamp, attracted by a Yellowthroat's loud singing. We also noticed a pair of Leconte's Sparrows acting in an agitated way and were just getting the glasses on the male, who uttered his swishing notes from a small willow, when I flushed a bird from the ground. I heard, rather than saw the bird, as it left the grass at my feet, and instead of looking at it, I concentrated my gaze on the spot from which it had fled.

Almost at once I saw the nest, constructed with the minimum of material in the centre of a "nigger head" covered with short grass. This hump was higher than most and therefore several inches above the water. As I stooped to look at this nest, a male Yellowthroat flew from a nearby willow clump and attacked the sparrow who had remained on his perch at the nearer clump. The sparrow at once fled to a spot some 30 yards away, from which it "chipped" with rage. The Yellowthroat then turned his scolding on to me, coming within a few feet and peering from behind his mask as he "churred."

I resumed my examination of the nest. I saw only the sparrow's eggs —three of them—and then I saw the two smaller and paler warbler eggs. For a second I thought this was a Yellowthroat's nest containing three cowbird eggs—I have seen this before—but it was certainly unlike the usual deep and bulky basket of coarse material which these birds usually build. And never before had I seen a Yellowthroat's nest completely hollowed in the ground; but they are rather attached to nettles, rank grass, or the stems of shrubs, and from a few inches to several feet up.

But when I removed one of each kind of egg I saw that the larger were no cowbird's effort, but undoubtedly a Leconte's Sparrow's, al-

most exactly like a Savannah Sparrow's; while the other egg matched the Yellowthroat eggs I had several times seen before, being rather like a Yellow Warbler's. Puzzled by this, and aware that the male Yellowthroat was still scolding, we decided to retire to a distance of some ten yards, where we sat on our heels in the wet grass and watched. What appeared to be a female Yellowthroat soon slipped through the shrubbery and flew to the hump. I asked my wife to circle around and put the bird up, which she did. The bird flew at once to the same bush as before, and at twelve feet distance proved quite certainly to be a Yellowthroat. Her spouse then re-appeared and scolded my wife, but as the Leconte's Sparrow regained the first bush and uttered its "chip" note, the Yellowthroat turned on him and drove him off.

We, and the birds, repeated this performance three times at half-hour intervals. Meantime, we made a further search and found a Yellowthroat nest about twelve yards away at the bottom of a hoary willow. This nest was thoroughly drenched and the lining was torn out, although only a portion at the bottom was actually inundated.

The only conclusion we could come to was that the Yellowthroat had built, and perhaps the female had started to lay, when their nest was rendered untenable by the recent downpours, and then subsequently gutted by magpies. The female, under the necessity of laying at once, had, with the assistance of her mate (who no doubt in any case resented the proximity of the sparrows) driven off the sparrows and usurped the nest.

Heavy rain and violent wind drove us away that afternoon, and the weather remained so wet and rough that in spite of good intentions I did not return to the spot until June 29th. Miss Belcher and I then then visited the spot, but the water was even higher, the grass had grown much longer and we were unable to flush the bird, or indeed to find any trace of the nest. Very heavy rain soon drove us off again, but not until we had located the Yellowthroat apparently busy about a hundred yards to the west; while the Leconte's Sparrows were finally run down some three hundred yards to the east, where the water was quite shallow and on drier knolls some saskatoons and chokecherries were growing.

In common with other observers I have often before noted the extreme and wren-like pugnacity of Yellowthroats on their nesting territory. This is mentioned briefly by the late P. A. Taverner in **Birds of Western Canada.** However, this is the first case I have met with of an actual usurpation by these birds of the nest of another species. No doubt this is simply a rare case due to abnormal conditions.

GEESE MAKE LONG WALK TO WATER

by **Bob Caldwell,** Wildlife Branch, Dept. of Nat. Resources, Saskatoon.

On Thursday, June 27, 1963, ecologists from the Wildlife Branch under the leadership of Jim Nelson and aided by Conservation Officer C. A. Reid of Maple Creek, banded a number of Canada Geese on the Martin Lakes, a series of small basins located on the edge of the Great Sandhills, northeast of Golden Prairie. Besides putting the conventional metal leg band on these birds, they were also marked with green plastic neck bands. Nine geese were captured and thus marked at this location, including three adults that were moulting.

The next day, while doing an aerial census of goose broods in the district, Nelson checked the Martin Lakes and also Bigstick Lake, situated several miles southwest. Geese were not seen on the former area, but several, including a large adult wearing a green neck band, were observed walking along the mud flats near the west end of Bigstick Lake. At that point the distance between the two areas would be approximately nine miles. As no other geese were banded in the vicinity other than those from the Martin Lakes, we can say without reservation that these birds, including both young and adults, walked not less than nine miles to reach the place where they were seen from the plane. While we think the distance is quite remarkable, so is the ability of the Canada Goose to locate another safe resting area by walking to it. Their built-in compass must work very well.

A POSSIBLE RECENT RECORD OF THE BARN OWL IN SASKATCHEWAN

by **Glen A. Fox,** Kindersley

The Barn Owl (*Tyto alba*) is only of casual occurrence in Saskatchewan (A.O.U., 1957). It is therefore of interest to record the following information. On May 18, 1960, I found the carcass of an owl, which I identified as this species, a few hundred yards from an occupied farm site, one mile south of Kindersley. It had undergone considerable decomposition but the white, heart-shaped "monkey face," and the long, unfeathered tarsi were still very noticeable. The plumage appeared to be very light with rusty markings. This data was recorded as part of my study of the birds of the Kindersley area. Unfortunately, as I was unaware of the significance of the discovery, the carcass was not preserved for confirmation of the identification, hence this should only be regarded as a hypothetical record.

There are apparently only two other records of this species in the province. William Pound is credited with collecting a specimen on May 5, 1924, at Aylesbury (west of Last Mountain Lake); the mounted specimen is on display in the Saskatchewan Museum of Natural History. The A.O.U. Check-list (1957) and A. C. Bent (1938) both refer to this specimen as the only one for the province. However, George Lang (Mitchell, 1924) mentions another: "I saw this bird on April 29, 1910, on the Experimental Farm (Indian Head); two days later a man brought a fine male in from Balcarres, which I am almost sure was my bird, and Harvey mounted it for him."

This species has been recorded only rarely in Western Canada and the adjacent States. There are no records listed in the **Birds of Alberta** (1958), and it is therefore of interest to note that the possible recent record described herein is for a location only 40 miles from the Alberta border. It is also the first record for Saskatchewan in almost 40 years.

LITERATURE CITED

American Ornithologists' Union, 1957. Check-list of North American birds. 5th Edition. Baltimore.

Bent, Arthur Cleveland. 1938. Life histories of North American birds of prey, Pt. 2. U.S. Nat. Museum Bull. 170. Washington, D.C.

Mitchell, H. Hedley. 1924. Catalogue of birds of Saskatchewan. Can. Field-Nat. 38:101-118.

Salt, W. Ray and A. L. Wilk. 1958. The birds of Alberta. Edmonton, The Queen's Printer.

NOTES ON A BURROWING OWL NEST

by **Mrs. E. Boon,** Tullis

A recent report of Burrowing Owls still living in burrows on September 9, 1962, at Regina (**Audubon Field Notes,** 17:43) interested me inasmuch as we had some still in burrows to October 14 in the same year. A pair nested in an old badger hole in a coulee about one-half mile from our buildings. As the nest site was close to our field road we saw them nearly every day. My earliest observation was made on April 26 when one owl was seen sitting near the badger hole. On April 30 there were two owls at the nest site, the second bird being considerably lighter in color than the first. Some two weeks later, on May 17, I noted that there was straw all around the hole and I found a dead field mouse in the opening. From this time on, I noticed dead mice around and in the hole every day, sometimes as many as six at one time (May 24). Occasionally during this period we saw one and sometimes both owls at a time. On July 23 two young owls emerged from the hole, and by August 31, there were actually 14 young owls at the nest site. These 14 young and their parents were still present around the hole on September 6, but from this time on they gradually left, a few at a time. On October 14 I found one owl still remaining, and it was gone when I checked the next day.

I presume Burrowing Owls begin to incubate as soon as the first egg is laid, as most owls do, but 14 seemed like an awfully big family to me However, there they were. By September they were very pretty, shiny and rust-coloured against the dead grass. They seemed to be slow in developing the ability to fly; they were only making short flights, and mostly just sitting around on September 6.

Ed. Note: Peterson (1961. A field guide to western birds) gives figures of five to nine eggs as an average, with a record of 12 in one clutch. If these 14 young birds belonged to one family, the clutch recorded above may therefore be a new record for this species. Tullis is west of Elbow in southwestern Saskatchewan.

SAW-WHET OWL — THE CASE OF THE WHISTLING RABBIT

by **Ronald R. Hooper**, Punnichy

The Indians of this area say that the rabbits (Varying Hare) whistle in the spring. They have pointed out this whistle to me since I have come to Punnichy. This call is an oft-repeated "Hoooo-oooo-oooo-oooo," etc., medium-pitched and in the minor key. The call is heard at night from February to April, in poplar woods.

I question whether this was rabbits' whistling for the following reasons. 1. I have been familiar with rabbits all my life, yet I never heard this call until I came to Punnichy. 2. Two or three of the Indians, who are more keen on nature observation have said that it is not rabbits but little owls. 3. My nature books make no mention of rabbits whistling. 4. The staff of the Saskatchewan Museum of Natural History have expressed their opinion in favour of it being owls rather than rabbits.

On the night of April 1, 1963, Tony Kinequon (an Indian), and I went out to Daystar Indian Reserve (12 miles north of Punnichy). We took along a powerful flashlight. We heard a "rabbit" whistling, and attempted to locate him. We found that this call could be heard for probably a mile or more. As we drew nearer to its source, we found that it was very loud, and more bird-like. After several attempts, we got near the creature, and shone the light upon a little Saw-whet Owl, who was sitting about ten feet up in a poplar. The light bothered his eyes, so he shook his head, then flew away. It is surprising after coming such a long way, and hearing such a loud noise, to find such a tiny creature. To our own satisfaction, at least, we had solved the mystery of the whistling "rabbits."

THE HERONRY IN STANLEY PARK

by **Mrs. L. Verreault**, Vancouver

Only four years ago I discovered the heronry at Brocton Point, about one mile from the entrance to Stanley Park where the Great Blue Heron nests in five or more tall Douglas firs.

Owing to the density of the forests the nests were not visible from the highway until the cyclone of October, 1962, uprooted some 3,000 of the tallest and oldest (up to 500 years old) cedars and firs. There was doubt as to whether the herons would return to these haunts now that there were conspicuous open spaces throughout the park but by the end of March, 1963, they could be seen flying into the tall trees with small sticks and grasses to rebuild and restore the old nests.

Last year on one occasion I counted 50 birds leaving the nests and flying over the gulf to the Fraser and Capilano Rivers, but I have rarely seen more than one or two in flight at one time and it is difficult to say exactly how large the colony is. There are ten nests in one tree.

On Saturday, June 22, 1963, I sat on the sea wall, about 300 feet from the trees and with binoculars was able to look into the nests and watch the adults feeding the young. If the birds are not disturbed they will, no doubt, return to Stanley Park for many years.

PARTIAL ALBINO REDWING SIGHTED FOR FIFTH YEAR

by **George F. Ledingham**, Regina

On July 21, 1963, while passing the slough adjacent to the Saskatchewan Falconry Association Banding Station just west of Regina I noticed a Red-winged Blackbird with conspicuous white primaries on both wings and with a white tail feather. It was like seeing an old friend again for this seems to be the same bird which I described in 1960 (**Blue Jay**, 18(3): 115) and which Bernard Haysom (**Blue Jay**, 20(3): 115) reported as being in the same territory for four years. Bernard Haysom had reported earlier in 1963 that this same blackbird was back in its old territory but I had failed to see it in my trips past the area until July 21 and again on July 23. Even when perched the bird is conspicuous for he frequently opens and closes his tail displaying the white tail feather. I think it is the same bird seen and described in 1960 even though there were no white tail feathers at that time, for the left wing has two unequal patches of white feathers. If it is the same bird it must now be six years old and the amount of albinism must vary slightly in succeeding years.

The Last Mountain Lake Game Preserve

by **Mrs. J. M. Rutherford,** Govan

On March 12, 1887, Lieutenant-Governor Dewdney of the North West Territories wrote to Thomas White, Minister of the Interior, Ottawa, recommending that the islands at the north end of Long Lake (Last Mountain Lake) be reserved for a bird sanctuary. These islands were the favourite breeding grounds of almost all the different kinds of wildfowl in the "north," and the island shores were literally covered with eggs in the hatching season, he said. Encroaching settlement might soon threaten the wildlife of this area, for would-be settlers were attracted by rumours of the probable extension of the Long Lake railroad.

Previous to this, Professor Macoun had camped at the north end of Last Mountain Lake in 1879. Macoun was commissioned by the Government of Canada to report on the land, agricultural possibilities, and natural resources of the prairie west. Possibly his very enthusiastic report on the innumerable waterfowl here made the Ottawa government receptive to Governor Dewdney's suggestion.

In June, 1887, Dewdney was advised that the Governor-General in Council had been pleased to set various lands aside under the Dominion Game Act for the protection of wildlife in this area. These lands were reserved from sale and settlement for breeding grounds for wildfowl. They were described in detail for the surveyors. They extended from Arlington Beach to the land at the north end of the lake, including most of the islands and parts of the shoreline. Altogether there were 2,500 acres of land. Correspondence on file shows that for several years after 1909, adjacent settlers made applications for portions of land in the reserve.

On July 26, 1921, there was a further federal Order-in-Council. This confirmed the acceptance of the Migratory Birds Convention Act, originally signed between Canada and the United States in 1916 (and most recently confirmed in 1961), and its application to the breeding grounds in the vicinity of Last Mountain Lake in the Province of Saskatchewan, already reserved by the order of June 8, 1887. Under the Migratory Birds Convention Act the Federal Government became responsible for the protection and management of migratory birds. In practice, however, wildlife is a joint project in which provincial and federal authorities cooperate—the return of the natural resources to the provinces in 1930 made this practice logical.

The 1921 Order-in-Council added islands not already included and specified small parts of the shoreline as well as all lands covered by Last Mountain Lake. The lands thus set aside and the entire water area of Last Mountain Lake were to be known as the "Last Mountain Lake Bird Sanctuary." The creation of the sanctuary within these boundaries had the full approval of Saskatchewan authorities. Within the sanctuary, shooting of game birds in the open season was permitted by the order in-council on all portions of Last Mountain Lake except the islands north of and including Pelican Island, Section 24, Township 27, Range 24, W. of the 2nd.

Long before man divided this continent with international boundaries, migratory birds came north with the lengthening days to nest and rear their broods. Long hours of sunlight and cool nights provided lush vegetation and aquatic and animal life for rapid growth. When winter came and northern streams were frozen over and snow covered the land, each species of bird in its own time quietly slipped away to the warmer south.

There are some important differences between the spring and fall migration of birds. Spring flights follow a long period of winter feeding in preparation for migration, while fall migration comes after a busy summer of feeding young and often a seasonal moult. So, many birds tarry in the fall in resting areas like the north end of Last Mountain Lake where plentiful food supplies have been built up during the summer. There many of them grow new feathers to replace the summer moult.

The width of Last Mountain Lake varies from one mile to three miles,

and the water in the lake is fresh and in some parts quite deep. In length, the lake extends 48 miles from Valeport to the north end. At the same time, the north end of the lake is about 50 miles from the Quill Lakes. For the preservation of waterfowl, it is urgent that a water conservation programme be instituted between the two lakes to repair the damage done by the flood of 1955, and to stabilize the water level. There are sources of fresh water throughout this country that could be used to supply water where needed, even to the salt flats. The increased rainfall of this summer has improved immensely the waterfowl situation, and we have seen many species lately that we have not seen for years.

We live eleven miles east of Pelican Island, and we have always been interested in the birds of Last Mountain Lake. Gulls from the lake follow the implements in the fields, and some evenings we have noticed great flocks flying back to the lake at sun down. Rural people are outdoor people, and those of us who live very close to the marsh and cross it many times have often looked for Whooping Cranes among the Sandhills that rest there in migration, and have made it a point to be able to identify the rare Whooper. We had the thrill of seeing one in 1962.

There is a biological reason for birds to come north to breed and raise their young. We can encourage this natural pattern by preserving a natural habitat both for breeding grounds and for resting areas in migration. This is the service that the Last Mountain Lake Game Preserve can offer. At the same time it is possible for the public to come into this area to enjoy these birds, for there are paved highways running north and south on both sides of the Game Preserve, and good gravel roads connecting these Highways #2 and #6 with the lake.

Plant Notes

Photo by the late Dr. W. C. McCalla.

Indian Breadroot on the prairie near Calgary.

Indian Breadroot

Photo by the late Dr. W. C. McCalla

Psoralea esculenta Pursh

Indian Breadroot is a common plant in dry prairies and calcareous and and sandy hills in the three Canadian prairie provinces. The flowers are blue-purplish and the plant is seldom more than one foot in height. The leaves are digitate.

Interesting Mosses from Elbow Forest Preserve in Southern Saskatchewan

by **Bernard de Vries,** University of Manitoba, Winnipeg.

In the summer of 1960 the writer discovered four interesting species of moss in the Elbow Forest Preserve in southern Saskatchewan. They were identified by Dr. H. Crum of the National Museum of Canada, and verified by Dr. C. D. Bird of the University of Alberta, Calgary, Alberta. The species in question were:

Cratoneuron filicinum (Hedw.) Spruc., de Vries #897, collected on a damp grassy hummock in wet meadow at the base of *Salix bebbiana,* in association with *Philonotis fontana.*

Drepanocladus vernicosus (Lindb.) Warnst., de Vries #915, collected on a damp grassy hummock in a wet meadow.

Meesia triquetra (Hook & Tayl.) Aongstr., de Vries #914, collected on a damp grassy hummock in a wet meadow at the base of *Salix bebbiana* var. *perrostrata.*

Philonotis fontana (Hedw.) Brid., de Vries #913, collected on a damp grassy hummock in a wet meadow at the base of *Salix bebbiana,* in association with *Cratoneuron filicinum.*

These collections are of interest for they shed new light on the moss flora of Saskatchewan and indicate how little we know of mosses in Saskatchewan. The collections of *Drepanocladus vernicosus* and *Philonotis fontana* are the first reports of these species for Saskatchewan. Bird (1962. Catalogue of the Bryophytes reported from Alberta, Saskatchewan, and Manitoba. Litho. Botany Dept., Univ. Alberta, Edmonton) recorded these two plants from neighbouring Alberta and Manitoba so my collections indicate that they may be found to be not uncommon in Saskatchewan in similar habitats.

My collection #897, *Cratoneuron filicinum,* is the first collection for Saskatchewan with exact location since Macoun's early collection from Medicine Lodge south of Wood Mountain. This plant is probably not uncommon and may be found in springy places throughout southern Saskatchewan.

Meesia triquetra (*M. Tristicha*) has been reported frequently from Alberta and Manitoba but it has not been collected in Saskatchewan since Thomas Drummond collected it along the Saskatchewan River near Cumberland House early in the last century. Voucher specimens with the writer's collection numbers are deposited in the National Museum of Canada, Ottawa, and the University of Alberta, Calgary, as well as in my own private herbarium.

The area in which this meadow occurs contains undifferentiated sands with a level to undulating topography. The meadow is located some four miles northeast of Aikow siding and about twelve miles southeast of Elbow. Aikow Creek, which is a part of the Qu'Appelle River system, runs roughly west of the area. The Elbow Forest Preserve is a part of the aspen parkland that extends southwards from the main zone along the South Saskatchewan River.

The meadow, in which the above mosses were fairly abundant, was surrounded by aspen and willows. The meadow had been subjected to grazing pressure and an active beaver colony was a disrupting factor in the community. Plants with which the mosses were associated are as follows: *Carex rostrata* Stokes, *Salix bebbiana* Sarg., *S. bebbiana* var. *perrostrata* Schneid., *Salix candida* Fluegge, *Salix serissima* (Bailey) Fern., *Betula glandulosa* Michx., *B. glandulosa* var. *glanulifera* (Regel) Gl., *Parnassia palustris* L., *Gentiana crinita* Froel., *Veronica americana* (Raf.) Schwein., *Lobelia kalmia* L., *Bidens cernua* L. Lack of time prevented examination of similar meadows in the area.

Special thanks are extended to Dr. B. Boivin, Canada Department of Agriculture Research Station, Ottawa, for checking the identifications of associated flora and to Dr. C. D. Bird who read the manuscript and offered helpful suggestions.

A Report of *Marchantia polymorpha* L., After a Forest Fire

by **M. V. S. Raju, T. A. Steeves** and **J. D. Caponetti***,
University of Saskatchewan, Saskatoon.

Marchantia polymorpha L., one of the best known liverworts, is a thalloid terrestrial plant often found in moist places. The thick dorsiventral thallus, which is the gametophyte, has scales and rhizoids on its ventral surface. The rhizoids, although they are absorbing organs, do not represent true roots (Fig. 1). On the dorsal surface, the thallus produces two kinds of organs, the gametophores and the gemmae-cups (Figs. 1, 2). The thallus bears either male gametophores (antheridiophores) producing antheridia or female gametophores (archegoniophores) producing archegonia (Figs. 1, 2). The archegonium encloses an egg, which on fertilization by the sperm produced by the antheridium develops into a complex structure, the sporophyte (Fig. 4). The sporophyte produces numerous spores and also elongated, hygroscopic, thread-like structures called elaters (Fig. 5). The spores are liberated to the exterior by the dehiscence of the sporophyte wall and are disseminated by the twisting of the elaters (Fig. 5). They ultimately develop into thalloid plants under favorable conditions.

The gemmae-cups are found on the dorsal surface in the mid-rib region of both male and female thalli (Figs. 1, 2). They enclose a number of flat, dumb-bell shaped structures called gemmae which are able to develop into new gametophytes (Fig. 3). A gemma from a male plant is known to develop into a male adult thallus bearing antheridiophores and one from a female plant producces a thallus bearing archegoniophores.

During a visit to the boreal forest in northern Saskatchewan last summer (July, 1962), several burnt forest areas were observed. We had an opportunity to get into an area of recently burnt forest on the La Ronge Highway, about 77 miles north of Waskesiu Lake. Interestingly enough, we observed *M. polymorpha* growing in isolated patches on moist burnt soil (Fig. 6). In fact, it was one of the most conspicuous plants. Both antheridiophores and archegoniophores were found in every clump (Fig. 6). This occurrence of a liverwort in such abundance and its apparent absence from adjacent areas, made us curious to know the conditions that favored the pioneering invasion of burnt soil by *M. polymorpha*.

An actual fire in a forest produces enormous heat, reducing the vegetation to ashes, including the undergrowth. The degree of destruction of the vegetation has been reported to be dependent on the type of fire, i.e., ground fire, crown fire, etc. (Daubenmire, 1959). Furthermore, the intense heat associated with a fire is known to destroy the viability of seeds and spores of many plants. The subterranean organs of perennials and of deep rooted plants often are not affected by it. The buried seeds and spores of plants also do normally escape fire injury. Moreover, in certain instances, the fire helps to crack open coniferous cones and consequently the seeds are liberated. The bare ground, after the destruction of vegetation by fire, may also result in the removal of competition that existed before fire. The exposure of burnt ground to insolation and removal of competition may favor the germination of seeds and spores under favorable moisture conditions and also stimulate the growth of some subterranean organs.

M. polymorpha is cosmopolitan in distribution, occurring under diverse environmental conditions (Schuster, 1957). Often, this and other liverworts have been recognized as ecological indicators of particular microenvironments. The occurrence of *M. polymorpha* in burnt deciduous and coniferous forests has been reported from North America and Europe. The exact conditions under which this liverwort invades and grows on burnt soil have so far not been deter-

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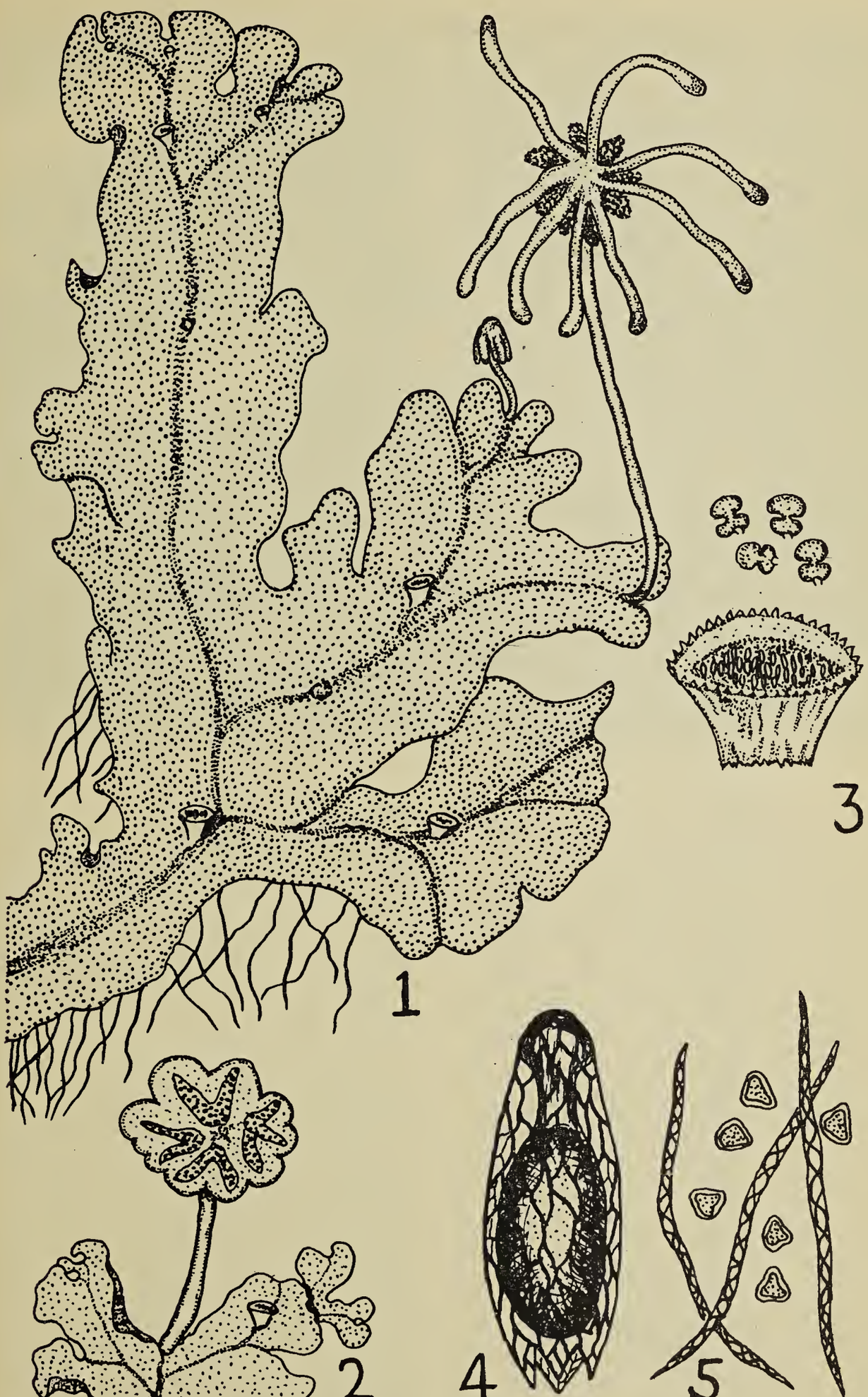


EXPLANATION OF FIGURES

Fig. 1. Thallus shows gemmae-cups, archegoniophores and rhizoids, X3.
Fig. 2. A portion of a thallus with gemmae-cups and antheridiophore, X3.
Fig. 3. A detached gemmae-cup with gemmae in it. Four free gemmae are shown above the cup, X6.
Fig. 4. An entire sporophyte, X15.
Fig. 5. A few elaters and spores, X50.

Fig. 6. Photograph of the liverwort in the burnt area. Note the gametophores and gemmae-cups indicated by arrows. X 1/3.

mined. Considerable work has, however, been done on *M. polymorpha* to find proper requirements for its normal growth under laboratory and greenhouse conditions. Experimental results reported in published works aid in an appraisal of the possible conditions that may have favored not only the pioneering invasion by this liverwort but also its subsequent luxuriant growth on burnt soil. The sudden appearance of *M. polymorpha* on freshly burnt soil might be explained in two ways. Firstly, it may have come from elsewhere and established itself on burnt ground. If so, the spores, which are very light, must have been carried by wind or other means from a considerable distance. The apparent absence of the liverwort in areas surrounding the burnt region and the absence of extraordinary dissemination mechanisms for favorable migration from great distances seem to suggest that spores did not come from elsewhere. The possibility of its survival in the vegetative state is remote for, in a laboratory experiment, it has been demonstrated that the thallus survived a temperature of 44.9° C and it died at 46.4° C (Schuster, 1957). In view of this, it seems more likely that spores, which are more resistant to adverse conditions than the vegetative thallus, were already present in the soil and escaped fire damage and germinated in profusion immediately after fire. However, detailed investigations would be needed to establish this fact.

It is known that fire brings about considerable decrease in organic compounds and mineral salts (Daubenmire, 1959). This change limits the growth of many plants considerably except those that can grow well under low salt concentrations in the soil. One such plant is *M. polymorpha*, which, according to experiments, is known to grow well in low salt concentrations (Voth, 1941, 1943). In the open burn forest, the thalli of this liverwort had produced a large number of gametophores. The production of gametophores has been shown experimentally in the laboratory to be influenced by day-length. The liverwort, if subjected to 17-18 hours of daylight per 24-hour cycle, produced gametophores extensively and relatively few gemmae-cups. Under 8-9 hours of daylight,

however, very few gametophores were formed and a large number of gemmae-cups appeared (Voth and Hammer, 1940). The production of gametophores is also known to be under the influence of concentration of salts. In about 0.2% concentration of salts in the substrate the thallus formed gametophores. In a similar experiment, 0.85% salts inhibited their development and a large number of gemmae-cups were produced instead (Schuster, 1957).

It thus seems possible that illumination and salt concentration, together with available moisture, could form essential requirements for the development of *M. polymorpha* on burnt ground. In nature, the level of concentration of salts in burnt ground is reported to be reduced considerably and natural illumination is also increased, particularly in summer (more than 16 hours per 24-hour cycle) resulting in great vigor not only in the growth of vegetative thallus but also in the production of gametophores. Furthermore, the removal of competition occasioned by fire is also an important factor which may result in the conditions that favour the pioneering invasion by plants. Although more work needs to be done in this direction, it can be concluded that forest fire brings about considerable changes in the environment which favour the development of a few plants in early stages of plant succession. Among these few plants, *Marchantia polymorpha* is one.

LITERATURE CITED

Daubenmire, R. F. 1959. Plants and Environment. John Wiley & Sons, U.S.A.

Schuster, R. M. 1957. Boreal Hepaticae, a Manual of the Liverworts of Minnesota and Adjacent Regions, II. Ecology. Amer. Midl. Nat. **57**:203-299.

Voth, P. D. 1941. Gemmae cup production in **Marchantia polymorpha** and its response to calcium deficiency and supply of other nutrients. Bot. Gaz. **103:** 310-325.

Voth, P. D. 1943. Effects of nutrient-solution concentration on the growth of **Marchantia polymorpha.** Bot. Gaz. **103:** 310-325.

Voth, P. D. and Hamner, K. 1940. Response of **Marchantia polymorpha** to nutrient supply and photoperiod. Bot. Gaz. **102:** 169-205.

Plants of the Dry Sunny Slopes

by **K. F. Best,** Swift Current

The rockcresses belong to the mustard family (Brassicaceae). Some refer to this family as Cruciferae, from the Latin *crux,* cross, and *fero,* bear, referring to the cross-like arrangement of the petals—a very marked characteristic of this family. These plants, even if not in flower, can often be recognized by the pungent or acrid taste of leaf and stem.

In the rockcress genus (*Arabis,* from Arabia), flowers are white, pink or purple, or rarely yellowish, and have the distinctive family character of four separate sepals, four sepate petals and six stamens, two of which are shorter than the others. The pistils mature into long, narrow, flattened pods with numerous seeds usually in two rows. Leaves are entire or toothed, stem leaves alternate, almost always stalkless and frequently with clasping bases. Usually there is a fairly dense cluster (rosette) of stalked leaves at the base of the stem.

The rockcresses are generally considered as of low forage value, but under some conditions, especially on overgrazed or depleted ranges, may be readily taken if succulent.

Reflexed Rock-Cress

Reflexed rockcress (*Arabis holboellii* var. *retrofracta*) is our most common representative of this genus, and is found on dry hillsides throughout the entire southern part of the prairies. It is a biennial or perennial, with one to several stems from the base, usually with appressed hairs, and grows from four inches to two feet in height. Leaves are generally covered with fine hairs, the lower leaves forming a rosette and the stem leaves often clasping the stem. The flowers, usually appearing in early May, are purplish-pink to white and are borne in a terminal raceme. The pods are almost straight but are bent abruptly downwards at the junction with the stem so that the pods are closely pressed to the stem. The long tap roots store food reserves and enable the plants to get an early start in the spring, and they appear to thrive on sunny slopes of hillsides under very dry conditions.

The earliest member of the pea family to check in for the spring parade of flowers is the cushion milk-vetch (*Astralagus triphyllus*), or tufted milk-vetch as it is often called. During the latter part of April and in early May, from a cushion-like tuft of silvery leaves, over two dozen cream-colored blossoms appear. A low growing perennial from two to four inches in height, it has silvery haired trifoliolate leaves, with elliptical leaflets from ½ to ¾ inches long. Although the stalkless flowers are generally cream-colored they occasionaly have a purplish-tinged keel. The flowers range from ½ to ¾ inches long and are borne at the base of the leaf stem or in the axils of the leaves. The pods are ovoid, silvery hairy, about ¼ inch long and enclosed by the calyx. Cushion milk-vetch is fairly common on dry eroded hillsides and on dry sunny slopes of our southwest.

Cushion Milk-Vetch

The Remarkable Squash

by **Alma Swain**, Saskatoon

Curcurbita pepo, more commonly called Squash, is a vegetable, a master planner, designer, and producer; it is a big-leafed sprawling plant that monopolizes the garden without seeming rhyme or reason. From the time the first two leaves crack the soil and push through to the sunlight, it looks as if it could master all it surveys; and it can, except for below-freezing temperatures which can really lay it low.

Those first leaves are not an indication of what its leaves are going to be like, but after that first bit of deception they begin to show their true form and are like cucumber leaves. Don't be fooled again, though, as when new leaves are added they are ever-increasing in size until you begin to think of the story of "Jack and the Bean Stalk."

So far so good; you have just learned to live with this overgrown child of the Pepo family when it begins to show signs of real growing pains. For now it has reached the adolescent stage and is beginning to send out gawky-lookings limbs in all directions, and each of these limbs will grow at least four inches every day. An unproductive bloom appears, a big happy yellow flower, slightly unsure of itself, and it soon folds up and drops off, to be followed by many more. The plant is not ready to reproduce yet, but Curcurbita in its wisdom knows that being bisexual it must be absolutely certain that when the female flower comes along there will be an ample number of male flowers around to assure it of good fertilization.

The spreading stalks thicken and send out strong tendrils. It is the tendrils that raise this plant far above the simple cabbage or turnip. At first they look like long straight fingers feeling around for something to grasp, and like baby fingers they close on anything that comes within their reach. If this happens to be the trellis, well and good. The fingers spread out and each one gets a hold. Then the most amazing thing happens—the thing that proves that science is not all in the mind of man. We know that a straight piece of wire hasn't the give and resiliency of a coil. These tendrils, not being content with anything less than the best, begin to take on a curly appearance; and before you know what is going on, there is the finest coiled spring you ever saw. Now let the winds blow and tug, let the fruit grow to any size; these ingenious springs will thicken and grow in strength and resiliency. There is one of these attachments for every leaf close to the spot where the bloom and heavy fruit will be.

The stage is now set for the female flower to appear, and one fine morning out she comes riding on a miniature squash. The male flowers are here, there, and everywhere, and so mating begins. When fertilization has taken place, the bloom drops off and the fruit begins to grow. Many of these female blossoms are discarded by nature; since the vine could not support or feed a squash at every section, a fine piece of selection takes place; Darwin calls it "the survival of the fittest," and so it is. Now just sit back and watch the chosen ones grow, and when the fruit turns a lovely golden color, cut one off and prepare it for the table. If you want a dish that is a gourmet's delight do it this way:

Pare, scoop out seeds and pulpy matter, and cut into two-inch pieces. Drop these into boiling water to which salt has been added. Boil until soft; drain, and place in a casserole. Pour some melted butter and brown sugar over the pieces, add one-quarter cup water, and put in the oven to bake for half an hour. Remove the lid a few minutes before serving so the squash will be dry and mealy. Serve.

CURATOR OF ZOOLOGY WANTED FOR MUSEUM

At the Summer Meeting in June, 1962, a resolution was passed urging the DNR to appoint a curator of zoology to the SMNH staff. Such a position has now been advertised: Museum Curator II, SMNH, Regina, to maintain and augment Museum collections in ornithology and mammology; with graduate degree, preferably in zoology, and experience in museum or related work (Salary $484-$589; Ph.D. $589-$715). We hope this position will soon be filled.

Junior Naturalists

Edited by **Joyce Deutscher,** Saskatchewan Museum of Natural History

FALL ADVENTURES AND ACTIVITIES

by **Joyce Deutscher,** Regina, Sask.

Let's look at some of the adventures awaiting boys and girls this fall in the classroom and out of it.

Fall is the time of increased activity as plants and wild animals prepare for winter. It should be a time of increased activity for boys and girls, too, as they crowd in all the nature observation they can before the snows of winter cover up much of what is to be seen.

Here are some suggested activities you can carry out either individually or as a group activity. Perhaps you can talk your teacher into using some of them as classroom activities:

1. Survey your back yard, school yard, sidewalk on the way to school, or a country road. List all the plant and animal life and other interesting features you can find. If you don't know the name of an object use descriptive words. If you live in the city perhaps you can list an interesting garden, the trees lining the sidewalk, a house with interesting stonework and similar items. Make a survey of the same area in the winter and again in the spring noting the changes. You will find your daily walk to school much more interesting if you are aware of the changes going on around you.

2. Here is a game you can play with your friends. Give each player or group of players a pail full of water from a pond with some of the mud included from the pond bottom. Explore your pail of water and see how many different plants, animals, and other objects you can find. A magnifying glass adds to the fun. Look up as much information as you can about the things you find in your pail.

3. Why don't you set up a nature trail? Find a wooded valley, a marsh edge, a sunny hillside, or even a grove of trees in your own back yard. Mark a path through it with numbered stakes. Set each stake at some point of interest such as an ash tree, a large rock, or a moss covered log. Take your friends along the trail and see what they can find that you have missed. Look up as much information as you can find about the objects along the trail. Make notes by putting down the number of the stake and the information you have about that particular part of your nature trail.

4. Pretend you are a Park Naturalist and take some of your friends on a nature walk and point out the things you see along the way. Then let someone else lead the group in another direction and see how much he can find to show the group.

5. Make a collection of dried weeds, leaves, flowers gone to seed, and containers — pickle jars, fancy bowls, soap dishes, boxes. Then plan a "flower" show. Arrange your dried plants attractively in containers and invite your friends to do likewise. This could be done as a classroom project with one of the entries being the arrangement of dried material from the plant families you are studying as part of your science course. For example, see who can get the most interesting arrangement of plants from the composite family.

6. Plan an art show. Take your crayons and make sketches and designs of fall flowers and other plants, also make arrangements of pressed leaves and paste them on a coloured background. Make seed pictures. Use the winged seeds of the maple for a boy's pants, a pumpkin seed for his body, and a stinkweed seed for his head. Use your imagination and invent other seed pictures. Draw lines for hands and legs. Invite your friends to send entries to your show.

7. Write about some of your experiences and adventures to this section of the **Blue Jay.** Encourage your friends to write as well. See how many of you can write a note about some of your observations which are interesting enough to get into print. But most important of all, have fun with your nature adventures.

CONTEST WINNER

Bohdan Pylypec is awarded the prize this issue for his continued interest and for his well-written accounts of his activities.

Painting by Norman Nelson

Mallard

HONOR ROLL

A number of junior naturalists have contributed fairly regularly to our section and we would like to give them special recognition such as "Honor Naturalist" or some such title after they have a certain number of items published in the **Blue Jay.** Any suggestions?

CONTEST RULES

Any boy or girl may enter the letter writing contest. Entries must be first-hand observations and not something copied from a book or other source. All entries must be accompanied by the name, age, and address of the sender. Send entries to Blue Jay Contest, Mrs. Joyce Deutscher, Saskatchewan Museum of Natural History, Regina, to arrive not later than October 15. Sketches and photographs may be sent in as well. The prize is a year's subscription to the **Blue Jay** plus the honour of seeing your items printed in the **Blue Jay!**

FLOWER IDENTIFIED

Bohdan Pylypec gives us the following report on the response he received to his question in the last issue of the **Blue Jay.** We are pleased to see this much response shown to his enquiry:

"The flower that I wrote about in the last **Blue Jay** is the Common Tansy (*Tanacetum vulgare*). I have come to this conclusion because I got a photo (coloured) from Mr. James L. Parker of Gilbert Plains, Manitoba, a leaf sample from Miss Elsie Dobryden of Sanford, Manitoba, and a leaf and flower sample from Mr. George Stevenson from the Brandon Experimental Farm herbarium. Miss Elsie Dobryden states

that this flower is also called by some people "Old Man's Whiskers."

Another letter identifying Bohdan's plant as Common Tansy came to the **Blue Jay** Editor from Mrs. Mary Capusten, Prince Albert.

THE HOUSE WREN

by **Arlene Swicheniuk**, age 13, Tarnopol

At our place we have a House Wren that built her nest under the eaves of our house The Sparrows do not chase the small House Wren away. The two families co-operate.

Early every morning and after sunset in the evening the House Wren sings by our window.

OUR WILDLIFE IS BEING EXTERMINATED

by **Bohdan Pylypec**, Yellow Creek

Years ago buffalo roamed the area. Now we have only traces of them such as buffalo skulls which we have found. One head is in good shape so we will use it as a decoration in our house. Elk, too, were in the area since I have found an antler of one. Deer were quite numerous some years ago, but now are quite scarce. Nine years ago when we settled on the farm where we are at present, deer would come curiously by our house and at a short distance would look inside the house through the windows. We would just look back. Even although deer are scarce a whole pack of hunters would go hunting and see how many deer they could get. Quite often these hunters were of the careless kind. They would shoot some cattle mistaking them for deer. We have had an occasion where some careless hunters shot at our bee hives instead of a deer.

Rabbits at one time were so plentiful that usually every morning after a snowfall tracks could be seen on our doorstep. Extreme hunting done both by man and predators (chiefly coyotes) and diseases have lowered the population. Some rabbits were shot for fun. Because of the low rabbit population owls, coyotes and other predators have found it hard to live.

Muskrats were, at the time of the wet years, plentiful, but then started an extreme trapping boom. Young and old alike were trapped until the dry years when the muskrat population was very low. During these dry years the animals had to migrate in search of water. They then became easy prey for predators. During this migration you could occasionally pass a hissing muskrat in some bushes.

GUM-CHEWING RABBIT

by **Gerald Swicheniuk**, age 11, Tarnopol

About the first part of May my Dad caught a baby jack rabbit. He was small and hard to feed at first Now we feed him with some milk, some grass, bark and other things that he can gnaw at. If he sees or smells gum he tries to get some.

He likes to dig in ground or gravel. Sometimes he likes to roll.

Do you think he will turn white in the winter time if he stays in the house?

HENPECKED

by **Len Nash**, age 13, Islington, Ont.

Early in June my friend Eric Southey and I started out on what we hoped would be an adventurous hike. We went to a small valley and wherever we turned our path was blocked by low, prickly trees. Many of these trees held the nests of Brown Thrashers and Robins. The Brown Thrasher nests were loosely constructed and made of leaves, twigs, and rootlets.

One nest which we discovered had the bird sitting on it and remained there silently watching us cautiously with its red eyes. When we went forth to examine the nest and its contents, the bird jumped around, screeched at us, and gave us a thrashing! It then alighted on a nearby tree. In the nest were five eggs, four being those of the Thrasher and the other one being a Cowbird's

Later in the day we found the nest of a Sparrow Hawk. When we climbed the tree to see the nest inside the tree, the Hawk swooped down at us in an attempt to scare us away from the nest. It scarcely missed me by two feet, and this brought back to me memories of last year when another incident like this occurred in which I found a nest of a Red-winged Blackbird and seconds later the screaming male Red-winged Blackbird lit on my head. After our many unusual experiences we left for home.

MAMMAL NOTES

A SECOND RECORD OF THE LONG-EARED MYOTIS BAT

by **Robert W. Nero**, Regina

A Long-eared Myotis (*Myotis evotis*) was found by Clarence Ritter, (Regina) on May 26, 1963, in extreme southern Saskatchewan. It was found resting beneath a slab of rock on an open eroded hillside in the valley of the Big Muddy River, west of Highway No. 34, and about 10 miles south of Bengough. The specimen is a female, with measurements close to that of the only other known provincial specimen, which was reported in 1960 (**Blue Jay**, 18:181). This second record provides further evidence of the distribution of this species throughout the arid southwestern portion of Saskatchewan. We are indebted to Mr. Ritter for bringing the specimen to our attention.

BEAR AND WOLVERINE NEAR BEECHY, SASKATCHEWAN

by **Dave Santy**, Beechy

Between four and five o'clock on the morning of May 17, 1963, the vigorous barking of the dog aroused the family at the farm home of Mr. Eric Tuplin four miles south of Beechy. The bedroom window of mid-teen daughter, Joyce, overlooks the lane and there she saw the dog attacking a black bear. The intruder was reluctant to give way but under pressure from the dog he left the farm. Joyce had seen bears before on vacation trips and is satisfied that she identified the animal correctly.

A few days later Leonard Rice who farms four miles east by south from the Tuplin farm was making the first round of a big acreage field with tractor and seeder equipment. Following the contour of a wide ravine he noted a movement in a clump of buckbrush and saw a bear rise and slowly thresh its way through the tangle of growth. Leonard was within ten feet of the bear when he stopped the tractor. The animal reached a grassy clearing, looked back, then ambled slowly to the bottom of the coulee, and the shelter of shrubs and trees.

Leonard left the machinery and ran the goodly distance home for a rifle and a truck. He sought the help and companionship of Bill Peters, two miles distant, and then went back to the coulee. They saw the bear's resting place and his tracks through the buckbrush and with rifles at the ready they searched the coulee till it merged with the Snakebite coulee which is over a mile wide. The bear had evaded them.

Lest some of our readers are not well versed in geography I might add that a bear in the Beechy district is as much a stranger as it would be on Scarth Street, Regina.

By coincidence, on the same date, May 17, Merlin Hungerford of Eston shot and killed a wolverine at his farm seven miles southeast of Eston, some 50 miles west of Beechy. When I talked with Merlin and his father on June 1 the wolverine hide was in the curing vat in the preliminary process of being mounted as a trophy.

THE LARDER OF A RED FOX

by **J. David Chandler**, Shaunavon

A Red Fox den containing a litter of seven pups was dug up six miles south of Shaunavon. The size and variety of their larder is quite revealing. The contents of the larder consisted of the following entire or partly eaten animals: pheasant, (banded), red-winged blackbird, rats, jack rabbits, mice, weasel, meadowlarks, mallards pintails, antelope leg, duck eggs, a wading bird, partridge.

WILDLIFE-PESTICIDE RESEARCH

Congratulations to the U.S. Department of the Interior which opened a new wildlife-pesticide research laboratory in April, 1963, at the Patuxent Wildlife Research Centre in Maryland "dedicated to Man - toward his future on this planet." It is the first U.S. federal installation built specifically for wildlife pesticide studies. "The work done here may prevent or halt the spread of 'silent wings' that stalk the earth," said Secretary Udall who opened the laboratory. The new laboratory will find out "what we are doing to our total environment by spreading millions of pounds of deadly chemicals over the land."

"Buffalo Stones"

Mr. Ben Weber, of Sedgewick, Alberta, writes:

In the second paragraph of Chapter V of Mrs. Kehoe's **Hunters of the Buried Years,** it says in part, "The chanting became tense as the four elders seated around the little image of a bison strained to put all their magical powers into the song."

I am enclosing a photo of what I believe to be "the little image of a bison," thinking it might be of interest to readers of the **Blue Jay.**

This stone was found in an area southwest of Sedgewick, where many indications of Indian camps exist. The image is approximately 11¼" long, 7" high, 3½" thick.

Mrs. Alice Kehoe comments:

The stone photographed by Mr. Weber appears to be what is commonly known as a "ribstone" (from its ribbed appearance). These are occasionally found on hilltops in Alberta and northern Montana. Some "ribstones" seem to have been been roughly carved by the Indians to heighten the resemblance to a buffalo, others seem to have been pecked at random or to represent abstract symbols. "Ribstones" include three kinds of stones: (1) stones, particularly standstone, on which bone objects and arrow shafts may have been shaped and smoothed; (2) stones on which an Indian "doodled" while waiting for friends at a rendezvous; (3) sacred stones which were supposed to be the residence of a spirit. Unfortunately, it is not always possible to decide which of these types a particular "ribstone" belongs to. There may also be confusion between aboriginally-carved "ribstones" and naturaliy-eroded or fossil stones, although naturally ribbed stones do not show the grinding marks left by the carvers of the "ribstones." Several Alberta "ribstones" have been described by James G. MacGregor in an article in the **Alberta Historical Review,** Vol. 7, No. 4, Autumn, 1959.

"Ribstones" are not the same as the magical buffalo stones used in the ritual calling a herd into a drive or pound. The stones in the calling ritual are quite small, fitting into little bags that are kept inside medicine bundles and carried about as the band moves. Blackfoot buffalo stones are usually ammonites (a fossil shell). G. B. Grinnell recounts the legend of the finding of the

Photo by B. Weber

Buffalo Stone

magic buffalo stones, **iniskim,** in his **Blackfoot Lodge Tales** (now reprinted in paperback, $1.50 U.S. from the University of Nebraska Press, Lincoln), pp. 125-6. Not all tribes used the buffalo stone in the calling ritual. The Cree, for example, prayed directly to the spiritual Master of the buffalo.

The "ribstones" that were sacred might or might not be thought to be connected with buffalo. Placed as they were on high hills, frequently near trails, they served as landmarks, and were really wayside shrines. Passing Indians stopped beside the rocks, prayed for success on their journeys or whatever else they desired, and left tobacco, ornaments, or a bit of clothing at the rock as an offering to the resident spirit. See Grinnell's **Tales,** pp. 262-3.

We would be interested to know whether Mr. Weber's "ribstone" was found on a hill or in a camp. If it lay alone on a hilltop, and had beads and other relics about its base, it was probably a sacred "medicine rock." If it lay among tipi rings or in the midden of a buffalo pound, it may possibly have been a grinding stone for the manufacture of bone and wood artifacts. It was probably not an **iniskim,** however. Our uncertainty about the true function of Mr. Weber's "ribstone" points up, again, that little can be said about any prehistoric artifacts unless we know exactly how they lay when first discovered.

Rockhound Notes

One more June meeting of the S.N.H.S. has come and gone. The many pleasant memories of the event will linger on through the months ahead. Judging from the number of members who crowded around the "rockhound" display, the evening of the business meeting, there were plenty of rockhounds in attendance. I regret that I was unable to meet all those interested in the display, but appreciate the keen interest shown in this phase of natural history.

Regarding the special "Rockhound Newsletter" that the S.N.H.S. made available to those members requesting it: thirty persons wrote asking for it, and several most interesting letters were received about it. Incidentally, there are still a few copies of this newsletter available.

The suggestion has been made that the rockhounds in the Society keep in touch with each other by continuing their correspondence through a central "clearing house" as it were, and that, for the time being, I receive this correspondence, such correspondence to be dealt with as seems advisable. This might be by personal reply, or briefly through the channels of the S.N.H.S.—either in the notes and letters section of the **Blue Jay** or in the Society's newsletter. I think there is merit in this suggestion and that we should try it out to see if it serves the needs of our group in the Society.

Summer is the time when rockhounds have the best opportunity to collect. How about writing us about your experiences, and your problems?

Yours truly spent a most interesting three days, following the Cypress Hills Park meeting, wandering around the Cypress Hills area in search of petrified wood, fossils, etc. Those hills and coulees can be recommended as places to get exercise and an appetite as well as some interesting specimens for your collection.—**Watson Crossley,** R.R. 4, Grandview, Manitoba.

BLUE JAY BACK COPIES

Are you interested in obtaining back copies of the **Blue Jay?** Which back copies do you want and how much are you willing to pay? Some thought is being given to reprinting back copies which are now out of print. If there is enough demand the price on back copies may be fairly reasonable.

Some Important Butterflies Captured By Junior Naturalists

by Ronald R. Hooper, Punnichy

Young people are very fond of nature. They are often thrilled by the beautiful butterflies that flit about, and sometimes they will catch one with their hat or in their hand in order to examine it more closely. Junior naturalists have often brought butterflies to me hoping that they will turn out to be a rare species but usually they prove to be something as common as the Cabbage Butterfly.

The keen eyes of junior naturalists must not be underestimated, however, for we have several species in our collection of Saskatchewan butterflies that we have not yet captured ourselves, which have been given to us from the collections of junior naturalists. The following is an account of some of them.

In the fall of 1955 a preacher's son, Wendell Marshall, of Eston, found some beautiful caterpillars feeding on dill in his mother's garden. He saved several of them in jars where they soon formed into chrysalids. The following February they hatched into charming Zelicaon Swallowtails (*Papilio zelicaon* Luc.). One of the chrysalids was darker than the others. It hatched into an entirely different butterfly, which turned out to be a Nitra Swallowtail (*Papilio nitra kahli* Cherm.). In seven summers of collecting since then I have not seen another specimen of this species.

I was enjoying the fine Junior Naturalist display of wildlife in Wascana Marsh at the Saskatchewan Museum of Natural History, in the spring of 1962, when suddenly I noticed among the butterflies a species of Copper (*Lycaena*) which I had never seen before. It is not in the Manitoba list of butterflies, but it is recorded from Calgary, Alberta. Alan Wade, Regina, one of the main fellows to arrange the display of Wascana Marsh wildlife, was kind enough to give me the specimen. Alan has a nice collection of butterflies in his home.

In the summer of 1961 Mike Rhodes of Moose Jaw was in some desolate, dry, prairie hills near Claybank when he captured a light-coloured, checkered butterfly. Later when I was looking at Mike's butterflies I saw it and knew that it was a species of checkerspot (*Melitaea*) that was new to me. It appears to be of a species that is taken in the Cypress Hills of Alberta, and so it may be expected in Saskatchewan, but it is surprising to see it show up as far east as Claybank.

Junior Naturalists — this proves that your collections can be of real scientific value. Here are some pointers to improve their worth.

1. Obtain a copy of **A field guide to the Butterflies** by Klots. It will give much helpful information concerning the mounting of butterflies.

2. Mount your specimens on insect pins. They can be purchased from J. W. Elwood Supply C., 1202 Harney Street, Omaha 2, Nebraska, or from Ward's Natural Science Est. Inc., Box 1712, Rochester 3, New York.

3. Make sure that you have a data label with each specimen, recording the place and date of capture of the butterfly.

CHRISTMAS CARDS AND HASTI-NOTES

There will not be a new 1963 Christmas card, as the Society has on hand a supply of cards from previous years. This was decided at the business meeting of the Society, June 15, when it was agreed that we should reduce stock before ordering another card.

However, the following cards are available from **The Blue Jay,** Box 1121, Regina,

CHRISTMAS CARDS: Yellow-headed Blackbird (1.00); Downy Woodpecker (1.00); Bohemian Waxwing (1.00); Boggy Creek (.75); Snowy Owl (.50).

HASTI-NOTES: Downy Woodpecker (1.00); Yellow-headed Blackbird (1.00); Sharp-tailed Grouse (1.00); Sunflower silkscreens (1.25).

Please indicate second choice, as some cards are in short supply. Note also that cards must now be ordered from **Blue Jay,** Box 1121, the Shop having been taken over by the Museum by arrangement with the S.N.H.S. this spring.

The Blue Jay Bookshelf

The publishers suggest:

DUCKS AT A DISTANCE. U.S. Dept. of Interior, Fish and Wildlife Service. U.S. Govt. Printing Office, Washington 25, D.C. Price 25 cents.

Full colour handbook, showing how to tell ducks and geese in eclipse and fall plumages by flight, colour, shape, voice.

BIRD WATCHING, HOUSING AND FEEDING. By Walter E. Schutz, 1963. Bruce Publishing Co., Milwaukee, Wisconsin. Price $3.75.

Comprehensive source book on attracting birds, with special section on bird watching.

STEFANSSON: AMBASSADOR OF THE NORTH. By D. M. LeBourdais. 1963. Harvest House, Montreal. Price $2.50 paper, $4.50 cloth.

Explorations that were the forerunner of a campaign to roll back Canada's frontier.

WILD PLUMS IN BRANDY. By Sylvia Boorman. 1963. McGraw-Hill, Toronto.

Book of wild foods cookery, appealing to people who love the out-of-doors, cooks and gourmets, to fishermen and hunters, and to those who simply like beautiful books.

Notes and Letters

SUMMER MEETING

In our day of motion and promotion it was a rare pleasure to have had the opportunity to participate in the annual summer meeting in the Cypress Hills. It was my first attendance as well as my first introduction to the Saskatchewan Natural History Society. I was impressed with the charming personality of the convocation—it seemed as if the harmony and peace of nature were reflected in its admirers—**Gordon W. Chandler,** Shaunavon.

The field trip was well planned and well looked after, but important as those factors are, I have the feeling that something else makes these yearly meets a continuing success. I think they are a success because each member knows that he has something in common with the other. They are a success because nature is something that can be shared.—**Ruth Chandler,** Masefield.

WARBLERS AT ROSTHERN

A fine run of warblers, including some rare species, occurred at our farm 3½ miles east of Rosthern this spring. On the afternoon of May 25, following the arrival of a blustery cold front the night before, in a small bluff of aspen and balsam poplar I identified thirteen species of warblers as follows: Black-and-white Warbler, Tennessee Warbler, Yellow Warbler, Magnolia Warbler (1), Myrtle Warbler, Bay-breasted Warbler (5), Blackpoll Warbler, Palm Warbler, Ovenbird, Mourning Warbler (2), Yellowthroat, Canada Warbler (1), American Redstart. The Blackpoll Warblers formed the largest group. On the same day my sister reported seeing a Wilson's Warbler. The next day all the migrants had gone. In addition, three more species of warblers were noted this spring: an Orange-crowned Warbler on May 16, a single

male Cape May Warbler on May 17 (the first Cape May I have ever seen here), and Northern Waterthrushes on May 27.—**Vic Friesen,** Rosthern.

BROKEN WING

The Franklin Gull shown in this picture was found on the shore of Last Mountain Lake at Foxes Point on June 29. The wing seemed to have been freshly broken so we brought the bird home and put on splints which it is still wearing on July 19. We hope to band the bird if it regains its feathers and its ability to fly.—**Martin Kesmarky,** Regina.

SAPSUCKER

We have many birds about our cottage at Whytewold Beach on Lake Winnipeg. Lately we have been watching a pair of Yellow-bellied Sapsuckers which have pecked right through the bark of the saskatoon bushes. The damage is considerable and it appears to us that the bushes will be killed eventually. What are the views of the society?—**Mrs. F. Bancroft,** Winnipeg.

* * *

SETTING THE RECORD STRAIGHT

Several serious readers of the **Blue Jay** have pointed out that the publicity "stunt" used in the June issue to launch the society's fifth special publication, Dr. Nero's **Birds of the Lake Athabasca Region,** could have been misunderstood by readers who did not recognize the parodied "northern air travel regulations" as a "spoof" (cf. Blue Jay, 21:84).

The **Blue Jay** editorial staff hopes that no one will look for the promised set of regulations in his local post office! However, the editorial board seriously believes that naturalists travelling in Saskatchewan's north should not be without Dr. Nero's unusual check-list of the birds of the Lake Athabasca Region—a check-list that is at the same time an authoritative survey of the birdlife of the area and an enthusiastic introduction to our fascinating undeveloped northland. I personally read parts of this book many times in manuscript form, and never without feeling the call of this great unexplored land.—Margaret Belcher, Assistant Editor, **Blue Jay.**

Cypress Hills Field Meet

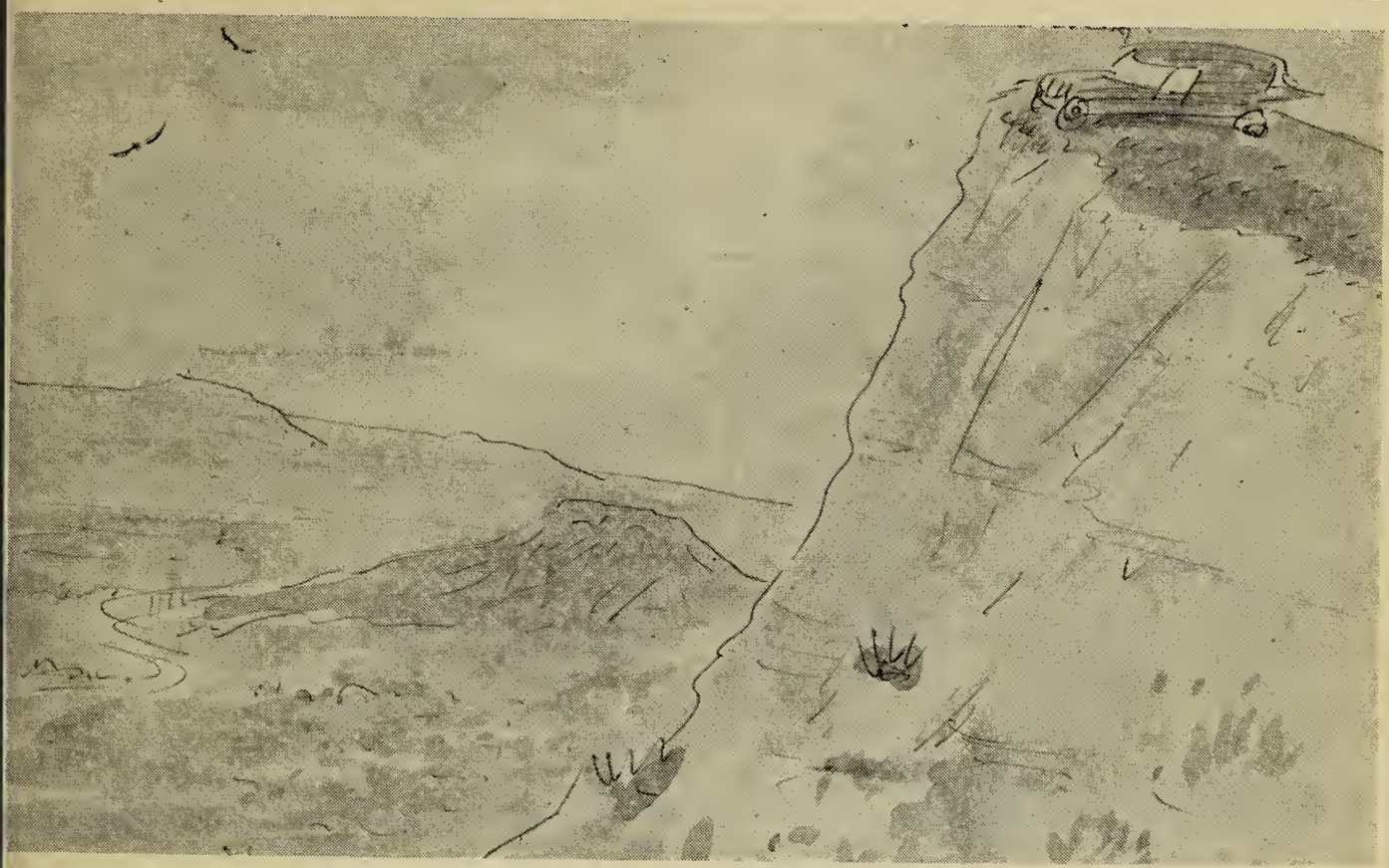
(Eleventh annual SNHS summer meeting, June 14-16, 1963)

by **Rose McLaughlin,** Indian Head

Attendance at the always popular SNHS field meet, held this year at the Cypress Hills Provincial Park, June 14-16, reached a record high of 175. During registration at the park headquarters Friday evening there was an informal gathering at which Steve Mann, SNHS president, and host and organizer for the field meet, outlined plans for the weekend.

Doug Wade of the Natural Resources Department and Mrs. Joyce Deutscher of the Museum of Natural History had been at the park all week with a group of Grade VIII students and teachers, assisting them in a pilot project on outdoor education, and part of Friday's programme was devoted to an explanation of their work. An unusual film was also shown on the banding of golden eagles at Beechy, one of the few known nesting sites in Saskatchewan, observed over the years by Dave Santy, a pioneer of the district.

Main feature of the weekend was the Saturday expedition to Fort Walsh in which over 40 cars followed a looping trail through green pastures, and sometimes beside still



Sketch by R. D. Symons

Visiting Prairie Dog Town with Ruth and David Chandler.

waters. Just at the park's edge there was an initial halt to climb Bald Butte, an old Indian lookout with a panoramic view to the north—Maple Creek nestled in the middle distance, and the sand hills far beyond stretching to the horizon 40 miles away.

In the freshness of the bright June morning people lingered on the slopes of "Old Baldy," bird watchers birding, flower hunters botanizing, rock hounds probing the boulder clay of the ancient moraine, historians comparing notes, and everyone visiting in kaleidoscopic groups. It was, perhaps, the finest moment of the field meet, though those responsible for some sort of time table may not have thought so.

At noon, many miles and many Texas gates later, having climbed by a steep switch-back trail up into the west block of the hills, we finally topped a crest and looked down on Fort Walsh, replica of the gallant little frontier post established by the mounted police in 1874 to keep peace among restless tribes and to bar the way to the lawless elements south of the "Medicine Line." The fort is now used as a remount station for breeding horses for the RCMP.

Our motorcade halted near the old NWMP cemetery and cairn on the hillside, and people picnicked in the grassy glades of the woods that clothed the slopes. One group was delighted to find the delicate shooting stars blooming in their dining nook and an Oregon Junco nesting in a nearby wolf willow. Afterwards, by arrangement with Ralph Bowman, manager of the Remount Station, there was a demonstration in the fort paddock of the trained mounts.

Back at the Park, later in the afternoon, a smaller group made an excursion to Béranger Creek, on the ranch of Frank Smallman, to view the only known trumpeter swan nesting site in Saskatchewan. Quietly climbing in a long row to the brow of the hill, everyone was able to peep over at the same time; the nest was visible with binoculars, and the stately swans swam about, not greatly disturbed.

At Saturday's evening gathering in the United Church Camp Shagabec, Society business was briefly reviewed, with reports from committee conveners on our Society's varied activities. The Manns served coffee and doughnuts at the social hour which followed.

A word here about the difficulty of organizing and keeping rolling a gathering of this type where people come and go, and are housed apart—in park cabins, town motels, tents and trailers, and homes of nearby

friends; where complete contact is impossible—though you might have tried smoke signals from Bald Butte, Steve!—and where, in any case, many like to feel free to go off at a tangent—swimming, fishing, repairing the car, visiting the Maple Creek museum or the prairie dog colony at Val Marie, or, like our party, fording the stream at Fort Walsh and roaming the woods beyond, "lost but confident."

Mention must be made of the early morning bird hikes, where most of the birders turn out to have flower books up their sleeves! Saturday we fanned out over the golf links up on the bench; and on Sunday after breakfast a leisurely group wandered down the delightful Hidden Valley Trail, renewing acquaintance with each other, as well as with nature.

Frank Roy, custodian and compiler of the bird lists, records 99 species, the following of special interest to those from parts of Saskatchewan where these birds do not breed—lazuli bunting, Audubon's, MacGillivray's and orange-crowned warblers, Oregon junco, white-crowned sparrows and dusky flycatchers in the park; rough-winged swallows, McCown's longspurs, and upland plover with young on the road to Fort Walsh; long-billed curlews on the way to Cypress Lake; and, of course, the trumpeter swans.

Flower lovers were thrilled with the sight, in some cases their first, of slopes blue with larkspur; of purple wild geraniums in the dimpled hollows above Fort Walsh; of the shooting star, lupin, and purple anemone; of the clumps of delicate southern coral root behind many of the cabins; of magnificent lodgepole pines in full bloom.

A glance through the register reveals an unusually large number of out-of-province guests, including Mr. and Mrs. P. M. Monckton of the Victoria Naturalists group, F. A. Dumond of Vancouver whose hobby is making telescopes, Kay Hodges of Calgary, well-known for her nature photography in the **Birds of Alberta,** R. D. Patmore of Patmore Nurseries in Brandon, R. D. Bird of Winnipeg, author of **Ecology of the aspen parkland,** and Watson Crossley of Grandview, Manitoba, whose rock collections have been an interesting addition to recent SNHS gatherings.

Birder John Lane of Brandon seems to belong with the hardy Saskatchewan perennials like Dr. Ledingham, **Blue Jay** editor, secretary Margaret Belcher, Elizabeth Cruickshank (best known as Liz Roley in the columns of the Regina **Leader-Post),** and colorful Ralph Stueck who spent Friday night in the sandhills catching kangaroo rats. (He had seven stashed in single apartments ranging from a camera case to an oil can).

Absent and much missed were Dr. Stuart Houston who was still in Boston, Bob Nero who was proofreading his **Birds of Lake Athabasca,** Manley Callin who was detained by illness in the family, and Doug Gilroy who was probably spraying his frenchweed.

Moving spirits behind this happy weekend were Mr. and Mrs. Steve Mann of Skull Creek and their assistants, Mr. and Mrs. George MacMillan of Maple Creek, who made all arrangements, with the kind co-operation of Mr. Dubroski, manager of the Cypress Hills Provincial Park, Ralph Bowman, manager of Fort Walsh Remount Station, and Frank Smallman, rancher in the Béranger Creek area.

LIST OF PERSONS REGISTERED

Assiniboia: C. Hayward; **Beechy:** D. Redley, D. Santy; **Cabri:** Mr. and Mrs. G. Fahselt and Norman Fahselt; **Dundurn:** Mrs. Edith Stait, E. Sullivan; **Indian Head:** Merle Bonner, Dr and Mrs. F. Fisher, Mr. and Mrs. S Grey, Mr. and Mrs. R. G. McLaughlin, Mr. and Mrs. R. Rollins, Mr. and Mrs. Skinner, Mr. and Mrs. Neil Swinton, Mrs. Betty Watson; **Kelvington:** Brian Irving; **Lajord:** Mr and Mrs. F. Sparling; **Langbank:** G M. Hewson, Robin Hewson; **Lewvan** H. McLaughlin; **Maple Creek:** Mrs. C C. Ambrose, Mr. and Mrs. F. Beveridge, Brian, Hazel and Rita Beveridge, Mr. and Mrs. L. Binkley, Mrs Edna Garissère, Lynn Garissère Mrs. R. P. Gilchrist, Mr. and Mrs. G. MacMillan; **Masefield** D. Chandler, G. Chandler, Ruth Chandler; **Moose Jaw:** Sylvia Curtis, Mrs. A. Davis, Kay Dewey Myrtle Dixon, Mrs. Nancy Dunn Miss H. Ens, Mrs. M. Guthrie, J. Horton, Mrs. Vesta Humphreys, Ra

Husband, Miss F. Johnstone, Freda Kennedy, Jean MacDonald, Mrs. F. B. Taylor, Mr. and Mrs. C. West; **Naicam:** W. Yanchinski; **North Battleford:** Marian Fletcher; **Piapot:** D. Borman, Edith Borman, H. Borman, Kate Shuard; **Punnichy:** Mr. and Mrs. Ronald Hooper; **Regina:** Nellie Ballantyne, Margaret Belcher, J. Bradshaw, Mr. and Mrs. F. Brazier, Mrs. Betty Cruickshank, Mr. and Mrs. A. Deutscher, Lucy Eley, Dianne Fahselt, Pearl Guest, Sylvia Harrison, G. F. Ledingham, S. A. Mernitz, Dr. and Mrs. A. Murray, Lucy Murray, B. Nelson, Martha Nelson, Sharon Olauson, Connie Pratt, Inez Sims, F. H. Sparling, Lois Sparling, Mr. and Mrs. D. Wade, Mrs. Evelyn Weisbrot and family, Connie York; **Rocanville:** Mr. and Mrs. E. Symons; **Saskatoon:** Mr. and Mrs. J. Barclay, Nancy Barr, Mr. and Mrs. Beer, J. Black, Eleanor Bowey, Jeannette Broderick, Gertrude Callin, Malcolm Campbell, Pern Cordery, Mrs. M. Evans, Marie Gillespie, Eleanor Hanna, Mr. and Mrs. J. Hogg, Margaret Mahon, Jean Meston, Mr. and Mrs. E. Opheim, Marie Pember, R. Pravda, W. Richards, F. Roy, Alvena Schnell, J. Slimmon, Mr. and Mrs. Frank Turner and Margaret Turner, J. Turnquist, L. Turnquist, Mr. and Mrs. W. H. Wickenden, Jean Winthrope, Lucy Young, Mr. and Mrs. C. Younger, Mary Zayachkowski; **Silton:** R. D. Symons; **Skull Creek:** Mrs. L. Bennetto, Mr. and Mrs. S. Mann; **Surbiton:** Mr. and Mrs. J. B. Smith, **Swift Current:** Mrs. Jean McDaid, Isabelle Powelle, R. Uglem; **Weyburn:** Phyl Farmer; **Wolseley:** D. Hayward.

ALBERTA: Calgary: Mr. and Mrs. A. R. Drever, Kay Hodges; **Lethbridge:** Mr. and Mrs. R. Schuler; **Sedgewick:** Mr. and Mrs. B. Weber.

MANITOBA: Altona: Mr. and Mrs. E. Howe; **Brandon:** Mr. and Mrs. L. T. Glaser, Mr. and Mrs. J. Lane, Mamie McCowan, Mr. and Mrs. R. Patmore, Mrs. Barbara Robinson; **Grandview:** W. Crossley; **Winnipeg:** Mr. and Mrs. R. D. Bird.

BRITISH COLUMBIA: Vancouver: F. A. Dumond; **Victoria:** Mr. and Mrs. P. M. Monckton.

ENGLAND: Liverpool: Patricia Marshall, Prudence Clarke; **Scunthorpe:** G. Mawson.

List of the Birds Recorded at the Summer Meeting in the Cypress Hills, June 14-16, 1963

On June 15-16, 1957, exactly six years ago, SNHS members recorded 101 species of birds at their first annual summer meeting in the Cypress Hills. This year the count was 99. The total number of species for the two outings stands at 120.

In 1957, observers added three species (Red-necked Grebe, Trumpeter Swan, Ring-necked Duck) to the list compiled by Godfrey in **Birds of the Cypress Hills and Flotten Lake Regions, Saskatchewan** (1950). This year, the Olive-sided Flycatcher, considered by Godfrey to be migrant, was heard and seen near Park headquarters; the Ruby-crowned Kinglet was recorded for the first time; and Doug Wade identified the rare Black-throated Blue Warbler (seen in the Park a few days before the meeting.)

Birds seen this year but not recorded in 1957 include — Double-crested Cormorant, Canvasback, Ruffed Grouse, Gray Partridge, Upland Plover, Black-billed Cuckoo, Say's Phoebe, Least Flycatcher, Olive-sided Flycatcher, Tree Swallow, Ruby-crowned Kinglet, Warbling Vireo, Black-throated Blue Warbler, American Redstart, Common Grackle, Lark Bunting, Baird's Sparrow, White-crowned Sparrow, and Chestnut-collared Longspur.

The birds listed below were recorded between Maple Creek and the Park, at the Park headquarters, on the trip to the West Block, and on the trip to Cypress Lake. Records of nests and young are added in brackets:

Red-necked Grebe (nest, 2 eggs), Horned Grebe, Eared Grebe, White Pelican, Double-crested Cormorant, Great Blue Heron, Trumpeter Swan (nest), Canada Goose (over 60 young), Mallard (young), Gadwall, Pintail (young), Blue-winged Teal, American Widgeon, Shoveler, Redhead, Canvasback, Lesser Scaup, Swainson's Hawk, Ruffed Grouse, Sharp-tailed Grouse, Sage Grouse (young), Gray Partridge, Sora, American Coot, Killdeer, Long-billed Curlew (young), Upland Plover (young), Spotted Sandpiper, Willet, Marbled Godwit, Wilson's Phalarope, California Gull, Ring-billed Gull, Franklin's Gull, Common Tern, Black Tern (nest), Mourning Dove, Black-billed Cuckoo, Common Nighthawk, Belted Kingfisher, Yellow-shafted Flicker, Red-shafted Flicker, Hairy Woodpecker, Eastern Kingbird, Western Kingbird, Say's Phoebe, Least Flycatcher, Dusky Flycatcher, Olive-sided Flycatcher, Horned Lark, Tree Swallow, Bank Swallow, Rough-winged Swallow, Barn Swallow (nest), Cliff Swallow, Black-billed Magpie, Common Crow, Black-capped Chickadee, Red-breasted Nuthatch (nest), House Wren, Brown Thrasher, Robin (nest), Veery, Mountain Bluebird, Ruby-crowned Kinglet, Sprague's Pipit (nest), Cedar Waxwing (nest), Loggerhead Shrike, Starling, Warbling Vireo, Orange-crowned Warbler, Yellow Warbler, Black-throated Blue Warbler (Doug Wade), Audubon's Warbler, Ovenbird, MacGillivray's Warbler, Yellowthroat, American Redstart, House Sparrow, Western Meadowlark, Yellow-headed Blackbird, Red-winged Blackbird, Brewer's Blackbird, Common Grackle, Brown-headed Cowbird, Lazuli Bunting, American Goldfinch, Red Crossbill, Lark Bunting (nest), Savannah Sparrow (nest), Baird's Sparrow, Vesper Sparrow, Oregon Junco (nests), Chipping Sparrow (nest), Clay-colored Sparrow, White-crowned Sparrow, Song Sparrow, McCown's Longspur, Chestnut-collared Longspur. **Frank Roy** (compiler).

NATURE CONSERVANCY OF CANADA

Federal Letters Patent to establish the Nature Conservancy of Canada have been granted. George F. Ledingham, Editor of the **Blue Jay**, has been elected as a Director of the Conservancy. It is hoped that something of the organization and responsibilities of this new organization may be announced at our annual meeting in Moose Jaw, October 19, 1963.

NOTICE OF MOTION

At the business session of the annual summer meeting June 15, 1963, S.N.H.S. members present supported a motion (Hewson, Lane) to have the executive bring before the membership at the annual meeting in October the following motion:

That full membership in the S.N.H.S. for adults, including subscription to the Blue Jay, be $3.00 per year; that the junior membership be $1.50; and that the annual subscription to the Blue Jay be $2.00.

The constitution of the society requires that no change in membership fees can be voted without previous notice being given in the **Blue Jay.** The above motion will be introduced at the meeting in October.

INFORMATION WANTED

The Delta Waterfowl Research Station is initiating a continent wide survey of non-hunting mortality in wild ducks. It is hoped that everyone interested in the welfare of wildlife will be willing to contribute data and so make this a truly co-operative effort. Data should, wherever possible, include sex, age, location, date, number, species, cause of death and any other pertinent data. It is hoped that the combined data will give basic information about the nature, extent and importance of non-hunting mortality factors. If you have information and want to contribute write to Delta Waterfowl Research Station, Delta, Manitoba, and a questionnaire will be sent to you.

S.N.H.S. Annual Meeting

October 18-19, 1963

The annual meeting of the S.N.H.S. will be held Friday evening and all day Saturday, October 18 and 19, 1963, in Moose Jaw, with the Moose Jaw Natural History Society acting as our hosts. Headquarters for the meeting will be the new Co-op Centre, corner of First Ave. and Athabasca St. W. Members will register from 7:00 p.m. Friday (CDT) or on Saturday, at the Co-op Centre. (Registration: adults - $1.00; children - no charge. Dinner tickets extra - $1.25).

PROGRAM

Scheduled for Friday evening, October 18

—executive meeting, 7:00 p.m.
—traditional informal get-together, 9:30 p.m.

Scheduled for Saturday, October 19.

—registration, 9:00 - 9:30 a.m. (Coffee available at Co-op Cafeteria)
—business session, 9:30 - 12:00 noon
—lunch hour, 12:00 - 1:30
—program of talks and pictures, 1:30 - 5:00 p.m., with coffee break at 3:15
—dinner, 6:15 p.m. followed by program.

ATTENTION MEMBERS

(1) A traditional feature of the afternoon program is the showing of members' kodachromes. If you have ten slides to show (five minutes program) report this at the desk when you register.
(2) Send resolutions and nominations to the Recording Secretary, Mrs. Thelma Pepper, 1015 Temperance St., Saskatoon.
(3) For further particulars re: program, write Mrs. Cy Knight, Secretary, Moose Jaw Natural History Society, 843 Elgin Avenue, Moose Jaw.

THE SASKATCHEWAN NATURAL HISTORY SOCIETY

OFFICERS (October, 1962, to October, 1963)

Honorary President ..... President J. W. T. Spinks, University of Saskatchewan, Saskatoon.
Past President ..... Ronald M. Bremner, 404 Medical Arts, Saskatoon.
President ..... Steve A. Mann, Skull Creek.
First Vice-President ..... Doug Wade, 1351 Jubilee Avenue, Regina.
Second Vice-President ..... A. O. Aschim, Prince Albert.
Treasurer ..... Frank Brazier, 2657 Cameron Street, Regina.
Circulation Manager ..... Frank Roy, 120 Maple Street, Saskatoon.
Editor ..... George F. Ledingham, 2335 Athol St., Regina.
Corresponding Secretary ..... Margaret Belcher, University of Saskatchewan, Regina Campus.
Recording Secretary ..... Thelma Pepper, 1015 Temperance St., Saskatoon.

DIRECTORS

Three-year directors: Dave Santy, Beechy; Robert Mills, Saskatoon; Jack Lane, Brandon; Robert Folker, Saskatoon; David Chandler, Masefield.

Two-year directors: Lawrence Beckie, Bladworth; Manley Callin, Fort San; Doug Gilroy, R.R. 2, Regina; John Hudson, Saskatoon; Ross Lein, Estevan.

One-year directors: Harvey Beck, Vancouver; Mrs. Keith Paton, Oxbow; Bill Richards, Saskatoon; Spencer Sealy, Battleford; Mrs. F. B. Taylor, Moose Jaw.

PRESIDENTS OF LOCAL BRANCHES:

Ron Lloyd, Meath Park; John Nelson, Moose Jaw; A. O. Aschim, Prince Albert; Herb Moulding, Regina; Frank Roy, Saskatoon.

CHAIRMEN OF COMMITTEES:

Bookshop: Mrs. Elizabeth Cruickshank, 2329 Athol Street, Regina; Conservation: R. D. Symons, Box 1121, Regina; Greeting Cards: Mrs. Dorothy Wade, 1351 Jubilee Ave., Regina; Membership: Frank Brazier, 2657 Cameron St., Regina; Newsletter: Doug Wade, 1351 Jubilee Ave., Regina; Prairie Nest Records Scheme: Elmer Fox, 3455 Rae St., Regina; Publications: R. W. Nero, University of Saskatchewan, Regina Campus, Regina; Research Awards: Elmer Fox.

BLUE JAY MAGAZINE:

Editor: George F. Ledingham, Assistant Editors: Robert W. Nero, Margaret Belcher, Joyce Deutscher.

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MEMBERSHIPS AND RENEWALS

All persons interested in any aspect of nature are invited to join the Saskatchewan Natural History Society. Membership dues per calendar year are currently: Regular, $2.00; Junior (including schools) $1.00. The **Blue Jay** is sent without charge to all members not in arrears for dues.

Date of expiration of your membership is stamped on your address label. Renewal slips are included in this **Blue Jay** in the hope that all 1963 memberships will be in by the end of 1962. (Note that there may be a change in membership rates after the October meeting.) This is also a good time to think of sending the **Blue Jay** as a Christmas gift. Christmas gifts will be announced by a card, and each new member will receive the December, 1963, issue, as well as four issues in 1964.

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Yellowthroat near nest. Sketch by R. D. Symons

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