

THE

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# Blue Jay Chatter

L. T. Carmichael, Editor.

(Photos by the Editor)



As we go to press, a magnificent Autumn follows a long period of cool and wet weather. An abundant harvest is being gathered in. Endless fields of golden grain are being swathed and combined. Here and there fields are dotted with stooks—a picturesque reminder of a familiar era which is passing from the Western scene.

Trucks of grain will soon be moving along the highways in an almost endless procession towards the nearest elevator. The prairie is a hive of industry, engaged in their noble efforts of replenishing and filling the bread baskets of the world.

Never have we seen the September meadows and roadsides more green or more beautiful. Purple and gold predominate—the purple of asters and blazing star—the gold of sunflowers of various species of gum-weed, broom-weed and numerous goldenrods. Edging the popular bluff in the meadow, the Blue Gentian, spring-like in its freshness and appearance, bids another farewell to a summer which is gone.

The sloughs are full of water. They are teeming with fowl and shore birds. Thousands of flocks of ducks, having reached the peak of their cycle of abundance, are congregating in preparation for their hazardous migration to the south. Great numbers of gulls are still circling and wheeling through the air, or dotting the black fallow like numerous balls of snow, cleaning up untold millions of destructive insects to the satisfaction and joy of the farmer. Blackbirds, in ever increasing numbers, growing from small flocks to stupendous armies, put on their annual air display, and fortify themselves with additional nourishment as they prepare to leave us again.

The Yellow Warbles also congregate as they move on; invade our yards and brighten our gardens as they pick up the numerous aphids which this fall cover the stems of many garden flowers, particularly sweet peas. The robins, also, bring all their families and relations—strip the choke-cherry trees of their last vestige of fruit—take a contented dip in the bird bath and pass on for another season.

Our wish to all our readers is a full enjoyment of Nature's autumnal splendors. May they all enjoy the wonder of this annual fall display of plant brilliancy and the mysterious exodus of bird life which follows in its wake.



*Photo by Doug Gilroy*

## *Photographing Fun With Flickers*

*By Doug Gilroy*

**L**AST YEAR the Flickers in this district had a tough time of it. Almost as soon as a nest was excavated a Starling took possession of it and Mr. and Mrs. Flicker were obliged to sharpen up their chisellike bills and start all over again in another section of the woods. The result was that by midsummer a Flicker in these parts was quite a stranger.

This year, however, the story is just the opposite. Starlings were few and the Flicker enjoyed a very productive season. Many nesting holes were drilled, some high, some low.

Anyone wishing to photograph these woodpeckers naturally would search for a low nest, and so it was that I found a dandy, not more than four feet from the ground in an old maple tree. The buzzing noise that came from within told me it contained young birds.

Here were ideal conditions for colour pictures. So the camera was immediately set up three feet from the hole. Next the remote control was fastened to the camera and I retraced my steps about five feet. There I sat down with my back comfortably braced against a tree and awaited developments.

In less than five minutes the female appeared and flew directly to the nest, ignoring the camera entirely. As soon as her sharp claws touched the bark, two of the young appeared in the opening, clamouring for food. I pressed the remote control button and obtained a very nice shot. She ignored the flare of the flash bulb and began to feed her young as only a Flicker can.

I always live in fear that, as sure as shooting, the young will have the inside of its head drilled out, for as soon as its mouth is open, in flies the parent's bill—in and out several times—with trip-hammer speed and action.

After resetting the camera and another five-minute wait, the male appeared and carried out the same operations as the female. He, too, ignored the camera, and another nice shot was obtained. This was indeed luck. I stayed around for an hour during which time the young were fed several times, but with the exception of the first time, the feeding was always done by the male. This I've noticed on many occasions—the male seems to be much the harder worker. Even when the eggs are being incubated, and one taps on the tree, it is nearly always the male that flies out.

Getting all the adult pictures I wanted, I went over to the nest and by enlarging the hole slightly to get my hand in, I pulled out one of the buzzing youngsters. To my surprise this fellow had a large scab covering the entire side of its face. Its eye was completely obscured. Its bill was twisted in the same manner as that of a crossbill. Perhaps that trip-hammer action of a parent's bill struck him in the eye when he failed to "open up" soon enough.

Later visits showed that his face was healing nicely and his eye was not going to be blind. His bill was getting straighter too. Here is hoping that by the time he reaches maturity it will be straight and strong, so that he too will be able to take his place with other healthy Flickers and thrill us with his drumming and hammering for many springs to come.

## Bird Haven Par Excellence

Florence Brooman, Prince Albert

ONE of the highlights of a trip to the south of the province this summer was a visit to Fred Bard's place on the outskirts of Regina. (Mr. Bard is Director of the Provincial Museum of Natural History). He has five acres along Wascana Creek which is a haven for birds. The grass and reeds are full of nesting ducks, grebes and coots. The sky is background to wheeling terns, darting swallows and flighty sandpipers.

A dugout provides water for irrigating a large garden full of fruits, vegetables and flowers. Surrounding it is a windbreak of trees and shrubs. There the Brown Thrashers and Cuckoos hide; Clay-coloured Sparrows and Kingbirds nest. In a high box a Starling family is keeping house, and everywhere one looks there is bird life.

Here is a wonderful set-up for studying birds at first hand. Mr. Bard, assisted by Fred Lahrman, is using it to the full by taking photographs and movies of bird activities and by keeping check lists and nesting records.

It is an inspiration to all nature lovers to see such a spot and encourages one to look for a similar place in which to live.

### Our Little Clown Of the Bush

Arthur Ward

AGAIN prairie conditions have assisted in the wide distribution of migratory birds. Those habituals, that stay with us to rest, have been sadly lacking again this year. Our usual numbers of Brown Thrashers gave us the go-bye, while the Tyrannus and Arkansas Kingbirds were in full strength. Our dear old jester, the Catbird, was very well represented and gave us the pleasure of its antics. It is a lover of thickets and hatches out from four to six green-blue eggs in a scrap-bag of a nest.

If he eats a little fruit he has our grateful permission as small pay for the destruction of moths. His glorious song, too, is another asset. Truly we would greatly miss our little clown of the bush if he did not show up every spring. He likes to investigate the traps and we present him with a nice bright new band on the left leg, which he displays to us when he returns the following year. We had one of these banded birds return last year and another one this year.

### Pelicans

By Evelyn M. Casson

ONE lovely afternoon late in July I noticed away up in the sky what appeared to be bits of white paper. There were three bits and they sailed in circles as if caught in a slow-motion whirlwind; a flash of white then gone—a flash of white then gone.

As I watched they came closer and closer and soon I could see the large beaks and the black and white markings of pelicans. The grace and beauty of their flight held me spell bound.

They flew in the form of a triangle, but each describing its own circle. Round and round they went in long graceful sweeps but staying in perfect formation. As I watched them I could almost feel with them their joy of that flight in the beautiful blue.

On they sailed over the house and to the north—back to the shores of Birch Lake and home.

### A Cardinal Visitor

Mrs. Bert Ford, Hazelcliffe, Sask.

IN JANUARY of this year, while visiting in Esterhazy one bright sunny afternoon, I was delighted to see a beautiful specimen of a male Cardinal. Having lived here for almost half a century and having been a bird lover, this was the first Cardinal I have seen. It was feeding on scraps of food put out for chickadees and seemed to favor a lilac hedge around the yard.

## Ways and Whys of Summer

By Elizabeth Cruickshank



Photo by Carmichael

**F**IELDS OF GOLD, ditches spilling over with gold — everywhere evidence of the “fulfilment of the year’s desire,” as we drove one day in mid-August to the Valley. A field of flax, like a patch dropped from the wide dome of heaven, made us catch our breath—“blue and gold on the plains of God.” Very soon tawny stubble would replace the grain. We found ourselves in that mood when “pleasant thoughts bring sad thoughts to the mind.” We passed through the shadow of the thought of winter, however, to enjoy this golden day.

We reminisced as we drove along, of the happiness and interest this summer had already given.

In our evening walks on the prairie, Fogarty and I try to miss nothing this “slice of earth” has to offer. Broom rape was very common this early summer. We wonder if all parasitic plants feel cold and clammy to the touch as it does.

One night I stopped to admire Cone-flowers in an arrangement to fire the imagination. Snowberry bushes for a back drop, asters, purple and white, with Gum-weed for colourful side drops—a stage set for comedy or tragedy. A mass of the Cone-flowers, with their high cones and bright yellow ray florets reflexed, like dancing skirts, formed the chorus, while three held front stage. Pale hollow seed cases of flax, like tiny clustered bells, swung in the breeze beside them. Across the field Fogey in confusion was jumping stiffly in all directions. We had seen many little frogs earlier (and wondered why) but they were not frogs he was chasing, but mice. Not Burns “Wee, sleekit, cowrin, tim’rous beasties” but high-jumping fearless little fellows, equipped, it

seemed, with invisible wings. We hurried away but returned with a young Meadowlark found dead in our path. We lifted it, disturbing busy Carrion Beetles, to bury the soft little bundle of feathers on the imaginary stage. The flax bells might toll now for a real tragedy.

On the hottest day this summer we saw Giant Hyssop growing by a valley road. A little lane through the trees, the fresh aromatic scent of mint led us to explore the cool retreat. We were thrilled to find Yellow Wood-sorrel, with its sensitive clover-like leaves that close up at night, beautiful Fringed Loosestrife, Skull Cap, Mint and Bur-marigold, with its heavy russet flower heads and magenta coloured stems.

It was the kind of day for gathering petals for our pot pourri jars. Judy knew where the roses formed a red carpet, which she had named “Flowerland”, a red carpet on the hillside. What happy memories on dull winter days their fragrance will revive.

But we had this sunny day still to enjoy. Besides a quiet trail we found silver-stemmed white (and pink) Evening Primrose and creamy plumes of Meadow-sweet. This aristocrat of the rose family with its smooth mahogany coloured stems, we had not found near Regina before. Bees crowded every blossom. Near a slough vivid pink racemes of *Persicaria*, white blossomed Arrow-head—a beautiful sight. Owl’s clover seemed abundant on the hill top where we found a sloughed snake skin, three feet long. Taverner says Crested Fly-catchers weave cast snake skins into their nests. Again we wonder why.

Swallows crowded the fence wires beside flocks on the road side. The soft wind was full of summer scents. There was music in the air—music that had reached, and passed, its crescendo passage.

Something in the mellowness of the late sunlight saddened us as we neared home. But our spirit rose again . . . two young robins were splashing in our bird bath.

Summer was not yet spent.

## Gull Colony at Waterhen Marsh

By Judge L. T. McKim

ON JUNE 15, Mrs. McKim and I spent the day on Waterhen Marsh near Kinistino. We found the nesting sites of hundreds of Franklin Gulls. The birds nest among the rushes where the water is from a foot to eighteen inches deep. The nests are raised up well above the water and each contained from one to three eggs.

The birds flew low overhead in great numbers protesting our intrusion in no uncertain terms. It was one of the most beautiful sights we ever saw and would have made a grand movie, as the birds were so densely massed that fifty or more were within a hundred feet of us at one time.

Within a very short distance of each other on the bank of the canal that once drained the marsh, we found three ducks' nests. One had four large eggs and four a little bigger than warblers', smaller than usually laid by an any duck but unquestionably duck eggs. As one of

my mallards laid an even smaller egg this spring, I believe they were all laid by a mallard. Another nest had ten Scoup eggs in it and three very large eggs; also a Teal's nest had seven of her eggs and one large one. It could be that the same duck laid in three nests.

We ate lunch on the bank of the canal near where a Canada Goose had successfully hatched a brood. In a bay of the lake we saw eight of these geese, perhaps last year's birds that had not mated. There is no question but these geese are making their summer home at Waterhen.

Gulls were all over the huge marsh and on the cultivated fields around it. I would estimate that not less than 500 gulls have taken up their summer home here. In a dozen places we found that ducks' eggs, Mallards I think, have been eaten, I presume by crows. An investigation some time ago showed that 39% of the nests on the canal bank are destroyed by crows.

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## Oven Birds at Spirit Lake

By William Anaka

ON MAY 23 I found a partly completed Oven Bird's nest in the bush about thirty yards from my home. C. Stuart Houston in his "Birds of the Yorkton District", lists the bird as an uncommon migrant, nesting just north of the Yorkton area.

The nest was on the ground, made of grass, leaves and rootlets, completely roofed over, with a side entrance. The bird was rather shy, keeping at a good distance and flitting around so quickly that I had a difficult time trying to get a good look at it. I finally identified it by the sharply striped breast and yellowish-orange crown stripe. Its distinctive song: "teacher, teacher, teacher, teacher"—the notes rising in volume, could be heard every day for several weeks after the young had left the nest.

There was some interference from Cowbirds and there was only one Oven Bird's egg in the nest at the time of hatching.

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## Buntings

Helen and Herbert Partridge,  
Gull Lake

There being plenty of moisture this year in our dry district, there is the greatest variety of water-birds seen for some years. Last year we observed many Yellow-headed Blackbirds; this year have been rewarded with but one specimen. Our wide rolling country is a great haven for the Lark Bunting. We were much interested in this delightful visitor. On June 26 we were fortunate enough to see a Lazuli Bunting. This is one of the most beautiful birds we have ever observed. It appears to feed on caraganas and comes close to the house. The blue head of this beauty, glittering in the sunshine, is a sight to behold.

## An Autumn Walk

By Evelyn M. Casson, Carter, Sask.

Photos by Carmichael

ALTHOUGH the sun was shining there was a hint of chill in the gentle breeze that blew from the north-east. As I walk alone I see and hear signs of autumn on all sides. There is a profusion of goldenrod by the roadside; blue asters cluster nearby and the lacy yarrow has grown quite tall.

In a nearby clump of poplars there is a flock of young crows which raise a hue and cry at my appearance; but they can't fool me—they are only youngsters, for their voices have a babyish quaver as they loudly call "Caw! Caw!"

Going on down the trail I came to a deep hollow, well shaded by tall trees under which grew a thick bed of golden St. Johnswort, nodding on their tall slim stems. It was a lovely sight and I, at once remembered the lines of the poem "The Daffodils", . . .

"Ten thousand saw I at a glance,

Tossing their heads in sprightly dance."

The plants were up to twenty inches tall — the leaves smooth and growing in pairs up the stem. On the top were three or four bright yellow blooms, each having five petals with shiny, golden-yellow stamens.



I walked on deeper into the woods. Suddenly I came to an open glade with large shade trees and no underbrush. There on all sides were dozens of those big mushrooms that spring up at this season of the year if the rainfall has been plentiful. There were all kinds and colors; big orange ones with tan flecks on them; flat cream-coloured ones; bright reddish-orange ones with round tops; white ones shaped like a saucer; golden-brown ones with a spongy underside, tan ones shaped like a funnel and bright red ones that looked like gay Mexican sombreros. Everywhere I looked there were mushrooms piled above each other and some growing so close to the trees that they were splitting as they grew. On measuring the largest one I found it was ten inches across and eleven inches high. They were a gay sight on this lovely fall day.

(Editor's note: Your find of St. John's-wort in Saskatchewan is an interesting one. I have never seen the plants growing here, but have collected specimens high in the mountains at Waterton Lake, Alberta. Four different species are reported from Manitoba. Yours may have been *Hypericum ellipticum*).

## *Brings Happiness to the Lame and the Blind*

(Note: The following letter to Mr. and Mrs. E. W. Van Blaricom of Tisdale, was written early in June by Miss Jessie Craig of Victoria, formerly of Tisdale. Miss Melburn, mentioned in the letter, used to lecture in Biology at the University of Saskatchewan and later on was in charge of all nature study in the Junior High Schools for the city of Ottawa. She is now retired and is living in Victoria. She has never lost her keen interest in our feathered friends.)

"A nice looking beautifully coiffed, stylishly dressed helplessly-crippled lady occasionally comes into the store. Recently she asked if I knew of any book that would help one to identify bird songs. She wanted the information for a blind and paralyzed young chap at the Veterans Hospital. (She herself has no use of her feet and legs and navigates by means of crutches).

I got in touch with Miss Melburn who immediately provided much information as to books and records. More—she took the lady seeking information and her blind friend into the woods.

Next day the crippled lady phoned me and a happier voice I've never heard! She didn't list her accomplishments but she explained that her friend had learned to recognize the songs of nine birds and that Miss Melburn is taking them out again — next time to the grounds of Government House. There are lovely trees there; it is probably rich in birds. I pass on the thanks of the lame and the blind."

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## *Spring and Summer Migrations*

*By William Niven, Sheho.*

**O**WING to the heavy snowfall and rains this spring, most of the small sloughs are full even now, though some of the larger lakes have a long way to go yet to attain the high levels they once had. For this reason all waterfowl and birds that live around water are quite plentiful. In some cases, such as the Yellow-headed Blackbird, greater numbers are here than have been seen for years. All the common species of ducks are quite plentiful.

Some of the land birds did not appear plentiful in migration this spring. The sparrows, such as the Junco, White-throated, and White-crowned were very few in numbers as compared to other years. Also the warblers had a poor year. At least I saw very few except Yellow Warblers which are always common. This may have been because the weather was warm in May and they may have passed through without stopping.

Large flocks of Lapland Longspurs and also those northern species of

Horned Larks (possibly "Hoyt's") were seen sometimes together on the fields during the first three weeks of May. The fields were fairly covered with them while they were here. While the Tree Swallows came about the usual time, May 1, the Barn Swallows were later than usual May 18. Brown Thrashers arrived before their usual time, May 5, but the Catbirds did not show up till May 28—a very late arrival for them.

The ones noted as first seen during June were Cedar Waxwing, June 8, about a week late; Black-billed Cuckoo, June 12, sometimes not seen at all; Bobolink, one only, June 25; Ruddy Ducks, two only June 25 — they have been very scarce during the last few years; Leconte's Sparrows—a pair found nesting June 26; Least Flycatcher, scarce this season. These last four species had probably been here for some time but, being scarce, are only seen in certain places.

Probably you, have already heard

(Concluded on page 9)



## Flowers of the St. Elias Region

Alaska Highway, Y.T., from Mile 1156 to 1206

By Eva Mudiman, Whitehorse.

**T**HE flower-hunting season down this picturesque part of the Highway is from mid-May to the end of August. It is farewell to the short colorful Yukon summer when the flame-like Fireweed and the Golden Rod nod again by the wayside.

One favorite flower spot is by the foot of a small glacier where a little spring meanders through the moss and rocks down the side of Mount Pickhandle. There in mid-May grow the mauve Crocus and white Plume Anemone. The purple Valerian has invaded the muskeg and the shin-leaf and star-shaped Pyrola bloom in the shade. Later on, the small Ladies' Slippers in shades of orchid, delicate pink and salmon will be blooming there. June's first week brings the Labrador Tea, Virginia Bluebells, Roses, Northern Bed-Straw and Arctic Lupine. These latter mentioned flowers line the Highway too, and few Marsh Buttercups grow in the ditch. To the westward, further down the mountain grow blue and white Columbines and little pink Twin Flowers. On moist hillsides and above timberline grows the Monks-hood. Campanula, purple spikes of bell-like flowers, grows on sandy ridges; it too climbs above the tree-line where one may wander through waving blue meadows of these last two mentioned flowers.

We've passed a Repeater Station and left Pickhandle Mountain behind. At Mile 1168 we catch a glimpse, through the trees, of two big red dispensing fuel tanks. There deeper in the woods, on either side of the road grow the beautiful white Orchids, common to the Yukon. Proceeding Northwards we come to Onion Lake, about Mile 1172. In mid-July we find the tall blue Iris blooming there and if lucky we might spy a few heads of the rare wild Heliotrope peeping through the tall wet grasses. The wild Onions are purple-headed for they have gone to seed.

As we near the White River area, about Mile 1180, we find beautiful wild Primula growing by the roadside. They are a faithful replica of the blooms on a well-known house plant. We pass by wild Sunflowers, Rough Fruited Cinq-foil and a few Arctic Poppies. The White River meanders around its gravel bars in many narrow streamlets before it becomes a milky white torrent as it rushes under the bridge. On its gravel bars grow large clumps of brilliant Vetch, spiked heads of small sweet-pea-like flowers in all their glorious shades. Their sweet scent, wafted on the sunny breezes, attracts myriads of bees.

On the way to Dry Creek Lodge and up to Mile 1206 we find pink Corydalis, and in later July Fireweed, Wild Asters and Golden Rod. At Mile 1206 the night-flowering Catchfly opens its sticky white flowers during the long twilight hours. The northern species of many familiar flowers differ slightly from their more southern counterparts. For instance, the Labrador Tea has much larger blossoms here; while the lemon-colored flowers of the Indian Paint Brush are hard to recognize. The Hare-bell hugs the mountain side with its shorter, stubbier stem and its bell is larger and bluer than ever. Another member of the Willow Herb family grows along the margin of many lakes and streams; its spray of flowers has larger richer-hued blossoms and has lost the conical spiked shape of the Greater Willow Herb or better known Fireweed. Driving down the Highway in August you will see patches of magenta and purple Fireweed going up the mountain to vie with the red and gold fall colors of the Birches and Poplars and making a vivid contrast against the sombre background of the Spruces.



Photos by  
L. T. Carmichael

## Mountain Memories

By Elizabeth B. Flock

**D**URING our June holiday in Banff and Yoho National Parks it was a pleasure to see again beauty spots not visited for years, while along the Jasper Highway and in Jasper National Park all was new country. The awesome grandeur of the scenery as we saw it in sunshine, rain and snow was an everchanging panorama of which we never tired.

Glaciers of all sizes became a common sight. The slowness of formation, the unseen motion forward or back, make them objects of wonder. It is one thing to read of the receding glaciers, but quite another to see how they have dwindled. The Athabasca glacier is now a mile from where it extended when discovered fifty years ago.

In Yoho valley we saw the havoc wrought by a snow slide of last winter. Masses of snow had tumbled from one side of the valley across the floor and piled part way up the opposite wall. Every tree in the path had been taken along with the snow in a jumbled mass of debris. Large trees left standing along the edge were splintered and twisted as if torn by giant hands. The road had been cleared leaving a solid wall of snow, that would be a long time in melting, on each side.

At every opportunity excursions were made on foot to see what plants might be found, both old friends and new ones. In the open country were shrubby cinquefoil, gallardia, red Indian paintbrush, blue flax, purple wild geranium, several members of the pea family. The wet places had quantities of shooting star with here and there a few butterworts and small clumps of round-leaved orchis. White globe flower, Labrador tea, saxifrage, purple clematis, green orchids, blue lungwort were abundant.

Sweet androsace was a new species with its cluster of small white flowers on top of a short, erect stem. The nodding yellow flowers of Drummund's dryas covering gravel bars and rocky ledges were another "first" since previously only the feathery seeds had been left later in the season.

The real find was on a solitary walk from our cabin on Tunnel mountain in Banff when beside the trail my eye fell on a clump of mauve-pink Calypso orchids. They looked so exactly like the many pictures in various botanies that I knew them at once. In his "Hill Top Tales". Dan McCowan mentions that the King and Queen saw these rare orchids along the Bow river in 1939.

Yet another new species was a true alpine plant growing near the Athabasca glacier, part of the Columbia Icefields. The purple flowers of moss campion dotted the solid clump of moss-like leaves that hugged the rocks. This low plant grows from a surprisingly large taproot.

At Bow Summit where spring had not left, tiny willows bore huge catkins and spring beauty covered the wet ground in places along with violets. One of the fascinations of mountain country is the change of seasons from one elevation to another.

Birds are not overabundant in timbered country, nor are they easy to see. There were pine siskins, mountain chickadees and bluebirds, Canada jays, Clark's nutcrackers, Tennessee warblers, Montana juncos, red-necked grebes, common loons, red-hafted flickers seen at various times. Moraine lake yielded a pair of harlequin ducks which are well-named. I have searched many a mountain lake over the years looking for them in vain.



In Johnson canyon, by sheer luck, I spotted a rufous hummingbird on her nest. It was on the sloping branch of a small bush overhanging the water and visible from only one spot. Frequently, she dashed from the nest to dip her bill into wild currant blossoms nearby. The day before I had caught the flash of red on the throat of a male rufous hummingbird as he rested on a wolf willow branch beside the Bow river.

Animals in the National Parks probably arouse more interest than anything else. Being fully protected, they go about their daily lives in full view of gazing tourists.

On many occasions moose fed in the marshes alternately plunging their heads into the water and coming up dripping, with a mouthful of plants which they proceeded to chew while cameras clicked and people stared. One especially fine specimen with magnificent antlers still in the "velvet" was close to the highway as it follows the Athabasca river.

Mountain sheep were seen frequently. Four rams made a tableau as they were eating something just outside the dining room windows at the Columbia Icefield Chalet. Suddenly two seemed to want the same morsel. With heads lowered, they backed away and then met head on in a terrific impact which seemed to clear the atmosphere. Later, in single file, they marched out of sight up the mountain.

Elk roamed the islands in the Bow river at sunset where we could spot them from above. The largest herd we saw was in Jasper not far from the townsite. They were a majestic picture trotting or walking over an open ridge from one feeding ground to another. Cows with calves dotted the steep hillside farther up.

Deer were seen often, some very tame. One buck licked salt from an outstretched palm as avidly as a small boy goes for sweets.

Along the Mt. Edith Cavell road a pair of golden-mantled ground squirrels had taken up residence at a "Viewpoint". No sooner did a car stop than they appeared hoping for a handout. At the end of the same road, the trail opposite Angel Glacier passed near the home of a hoary marmot that was busy eating as we walked by.

Of course, bears are the chief attraction since they line the highways to hold up motorists who choose to disregard the warning against feeding them. Many bears brought their cubs along. In June they were still very small and too cute for words. Some remained well off the road where they put in the time playing together or racing for a tree to climb if any unusual noise occurred. One lone cub amused himself tearing up a bread wrap while his mother parked on the highway. If a car stopped beyond her she galloped up to meet it. The mother with three cubs had her hands full. She was being fed popcorn, but the cubs swarmed about the man imploring him with their looks while two clutched his legs. The mother sat back on her haunches or stood up as he raised or lowered his outstretched hand. Finally, one cub gave up and tried in vain to scramble into the back of the parked car. Every new noise sent him scurrying under the car only to reappear and make for the back seat again.

One evening along a trail we came upon two bear cubs playing. We were not sure whether the mother was near or not so made a hasty retreat up the steep incline without pausing for breath since we had no wish to mix with the mother. Later, under the trees not far from the road, we saw two cubs nursing and fancied they were the same, perhaps heading for the auto camp across the way. The mother kept sniffing the air and moving her head constantly while the cubs enjoyed supper. That was our choicest bear memory.

There is nothing like travel to enjoy "a fresh footpath, a fresh flower, a fresh delight."

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### Spring and Summer Migrations

(Continued from page 6)

the report of the Canada Goose nesting in a hawk's nest. It was only about three or four miles from our place but I didn't go to see it. I heard from reliable witnesses that quite a few people had seen it. The hawk's nest was twelve or fifteen feet from the ground on the "Flats" north of here. I believe the goose brought off her brood successfully.

## Birds and Moths

By Mrs. F. Bilsbury, Grenfell.

AS THE MIGRATION of spring birds is now over and nestlings are taking to the water or the wing, I think it is time to send along my few notes of interest.

After the snow had finally gone and things became more springlike, I started to take short walks, going in a different direction each time. One morning just after a light fall of snow I noticed a fair-sized sparrow-like bird perched on the side of a wagon-box filled with seed wheat. As I saw at once it was a stranger to me, for it had a black face. Later I identified it from Taverner as a Harris Sparrow. Another came and joined the first but after two days I did not see them again.

To date (June 25) I have seen more robins and orioles in and around our trees than I can ever remember. There are at least five pairs of orioles and even more robins. A pair of Kingbirds returned again to nest but in a different grove. At one time I saw a flock of seven. Several pairs of Mallards, Pintail, Baldpate, Teal, Canvasback and Red-head Ducks have stayed in our slough.

Two farmers have reported finding hawks nesting on the ground in combined stubble. Can some member tell me why these hawks are grounded, instead of nesting in trees as is their usual habit?

Although there is a bounty paid for crow and magpie eggs and legs, my husband and I have forbidden any such robbing to be carried out on or about our farm. With the threat of cutworms, wireworms, grasshoppers, etc., we find Nature's way of ridding ourselves of these pests less costly than poisons, sprays and what not. Last year crows were noted in flocks of from 50 to 75 on some parts of a fallow field. This year this land is in crop and no bald places are seen.

Crows, Magpies, Blue Tern and Marsh Hawks follow my husband as he plows with the tractor; the hawks getting mice that flee from the advance of the machine, the crows gathering worms.

We caught a number of caterpillars in the cocoon stage and the

moths which we raised have been a delight and surprise. We found, quite by accident, that one was a Puss Moth, but we are not able to identify the other two. One moth, rather small, had the appearance of a bumblebee — transparent wings edged in bronze. The other was a lovely fawn color on top, wings edged in deep cream and under-parts rose. Anyone know them?

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### Red Crossbills

Judge L. T. McKim

IT is always a thrill to see a new bird. Last week I had that experience when scores of Red Crossbills fed on elm seeds on the Court House lawn and a little girl brought me an injured bird.

Since then several people have reported them on their lawns. A flock has just come to the grounds here as I write (June 28).

These beautiful birds are most irregular in their habits. They may visit a locality for several years in numbers and then not be seen again for a long time. I am surprised to see them at this season when one would expect them to be on their nesting grounds.

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### Conservation Pledge

I give my pledge as a Canadian to save and faithfully defend from waste the natural resources of my country—its soil and minerals, its forests, waters and wildlife—

—Author unknown.

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### A Wide Circulation

THE last Issue of the BLUE JAY in some way found its way to Cape Town, and was brought to the attention of Mr. Ernest Middlemiss, Secretary of the Wild Life Protection Society of South Africa.

Mr. Middlemiss was interested. That Society is now on our mailing list.

## Bone Handles and Pottery

By Allan J. Hudson

**T**HE FULL SERIES in the deepest excavations in the Besant (Sandy Creek) valley is, first, the modern sod, approximately a foot in depth; second, a drift sand zone varying considerably in depth; third, the black earth horizon or zone averaging at least fifteen inches in depth; and lastly, a light colored zone probably derived from the original river bank by washing or slumping and resting directly on a level river sand bed.

At Hearth 2, where I have worked the last two summers, the light colored zone has not shown up as yet. The black earth rests directly on the floor which is sterile.

Within the modern sod, about six to eight inches below the surface is a distinct bone layer and it is in this bone layer that socketed bone handles occur, and only there so far. They have been made by cutting a groove all round a rib bone and breaking in two. We find both the used handles and the rejects. Very rarely one side of the bone handle is decorated with criss-cross diagonal scratch marks evenly spaced; more often the edges have notches cut in them, sometimes continuously and sometimes in paired groups. What they were used for is a problem. We have never found one in direct combination with any stone artifact. It is usually thought that scrapers were fitted into them but unfortunately for the idea, there are no scrapers to go with them—the common type scrapers are quite unsuitable. Perhaps the problem illustrates the limitations of surface collecting. In the black earth zone a rare scraper or shouldered knife may be found that can be fitted into the socket but excavation work shows that there may be as much as a thousand years between the periods, though one would not know that by relying on surface collecting for evidence.

I have seen it suggested that they could be used to hold points in order to grind, and a careful cleaning out of two I found recently show that the socket is suitable for the purpose. The older points found in the black earth layer are too big and thick, but some later points, somewhat slimmer and narrower would fit admirably. Some triangular forms which may be knives or scrapers rather than projectile points could be used with bone handles, but whether the proper correlation can be shown, I am not prepared to say at present.

Further to the appearance of pottery in this area the black earth zone contains two distinct bone layers, the lower one, about eight inches above the river sand floor, being the heaviest. In June of this year, pottery with a wrinkled outer surface has shown up in this lower bone layer. But in July I obtained several pieces—some of the rim pieces fitted together—in the bottom six inches of black earth. It is quite plain and somewhat crumbly, being made of poor material. There is an interesting question regarding Indian pottery. Only a few miles from the site are exposures on the face of the Missouri Coteau of true pottery clay, but the Indians do not seem to have used the material. In view of the tremendous exposures of pottery clay in southern Saskatchewan, did the Indians make effective use of the material Nature so generously provided?

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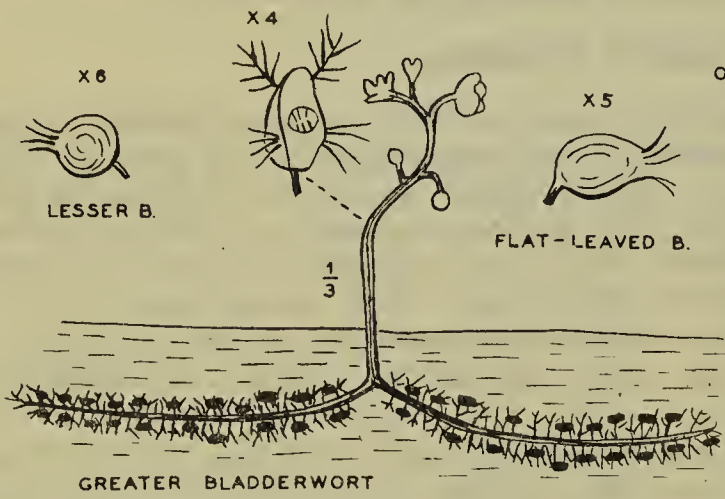
### Starlings

H. M. Rayner, Ituna

**I** NOTE on browsing through the Jan.-Feb.-Mar. BLUE JAY, that a lady who lives in the Qu'Appelle Valley mentions the European Starling and asks if they are becoming more frequent visitors or habitues of the prairie west.

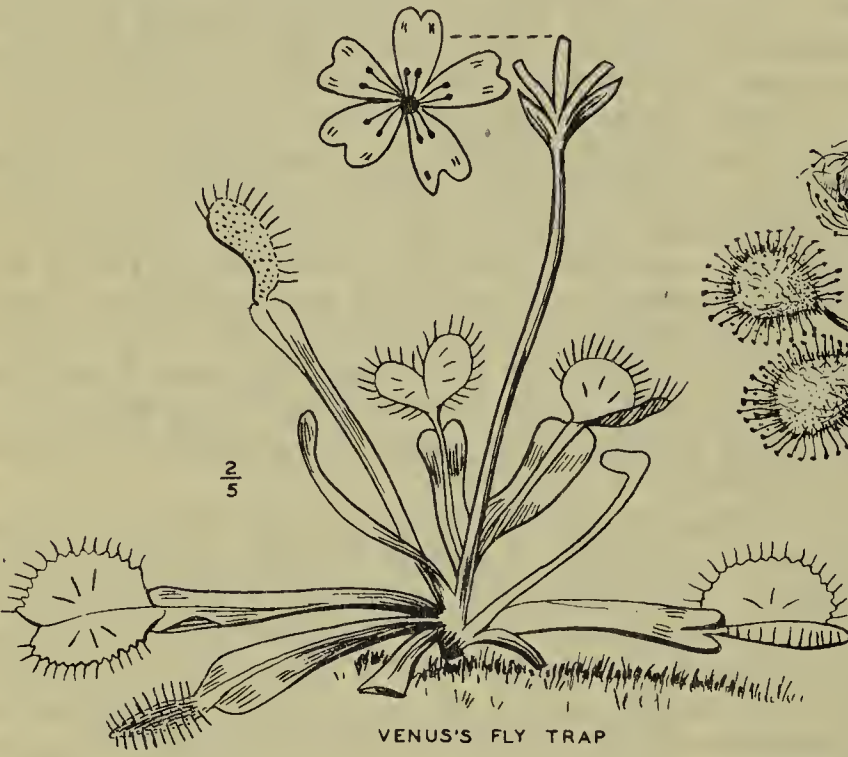
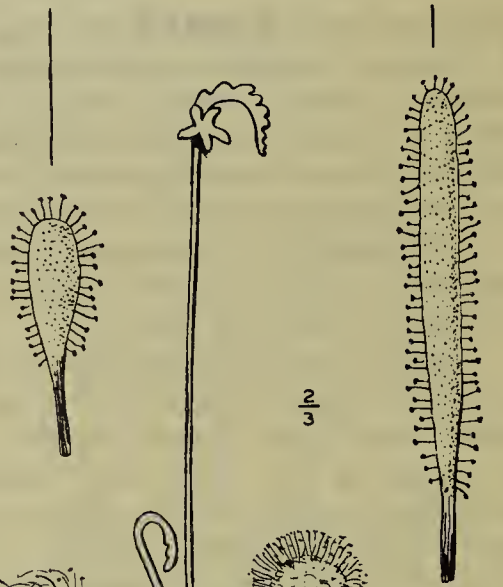
I noted them for the first time at Ituna, this spring. It was in early May. A small flock of about eight or ten birds were seen in the garden, feeding on garbage accumulated during the winter and uncovered by the melting snow. I have not seen any since, but I take this for a sign that they are getting established in the province.

# CARNIVEROUS PLANTS

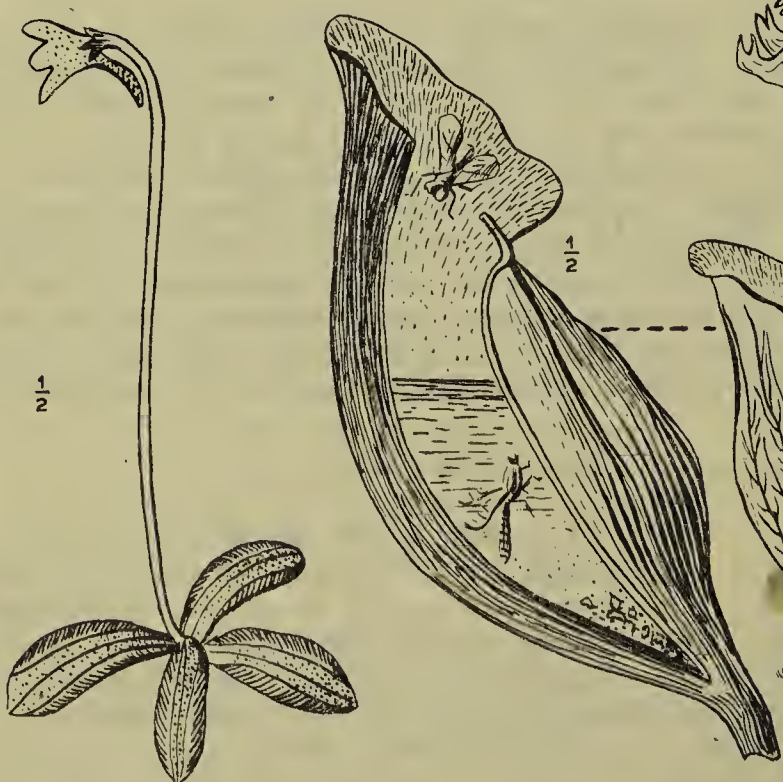


OBLONG-LEAVED S.

LINEAR-LEAVED S.



ROUND-LEAVED SUNDEW



BUTTERWORT

PITCHER PLANT

## Carnivorous Plants

A. J. Breitung

**T**HE PREDATORY METHODS of carnivorous plants are strangely fascinating. Throughout the world, there are approximately 500 kinds of plants provided with traps, pitfalls or other means for the purpose of capturing animals, chiefly insects, as a source of food supply. While an elaborate and astonishing variety of trap structure is exhibited, each different, yet perfect, the process of digestion is essentially the same. What is even more remarkable is the fact that these plants possess chlorophyll and the carnivorous habit is not essential to their existence. Though, they usually occur where the supply of nitrogen is deficient, animal food is beneficial.

Carnivorous plants display the most sensational power of movement in plants and stand out, unique, as some of Nature's strangest results of special adaptation.

Probably the most remarkable of all carnivorous plants is the Venus's Fly Trap (*Dionaea muscipula*), found in the Carolinas. Its success depends upon rapidity of movement. Each leaf is provided with what may be called a "steel-trap" mechanism. So sensitive is this contrivance that when the trigger-hairs, located on the upper leaf surface, are touched, the two halves of the leaf fold upward within less than a second and form a trap holding fast its victim.

In Saskatchewan, carnivorous plants are represented by the Pitcher Plant, Sundew, Butterwort and Bladderwort.

The Pitcher Plant (*Sarracenia purpurea*) is the most extraordinary plant of our flora. Flowering in May and June, the stately purple blossom rises conspicuously above the other bog plants. The leaves are modified into gracefully shaped, tubular, crimson-veined pitchers, usually partly filled with water. The inside of the lobe or spout is coated with a thin film of sweet juice to attract insects. From this surface protrude numerous, slippery, downward pointing bristles. The insects slip down the brink into the water of the pitfall. Every attempt to climb up again is rendered futile by

the sharp bristles. The captured victims soon succumb and their bodies are decomposed by the action of digestive juices secreted from the wall which impregnates the water of the pitcher. Bacteria, which are always present, may assist in the decomposition. The products of decay are absorbed as nutriment by the epidermal cells at the bottom of the pitcher.

The fact that larvae of certain small insects frequently live in the water of the Pitcher Plant and nowhere else, is curious. They seem to be impervious to the digestive juices secreted by the plant.

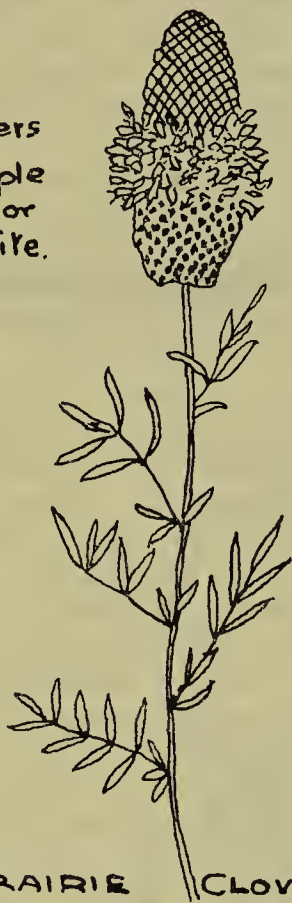
Three species of Sundew are found in bogs in the coniferous forest. They are: Round-leaved Sundew (*Drosera rotundifolia*), Oblong-leaved Sundew (*D. intermedia*) and Slender-leaved Sundew (*D. linearis*). Sundews are of great interest because of their carnivorous habits. The small, white flowers are borne in a raceme on a slender stem arising from a rosette of leaves which are thickly covered with gland-tipped hairs. The glands exude a sticky fluid which glistens in the sun like dew-drops. Insects become entangled and trapped when they come in contact with the leaf. By stimulus, the whole leaf may fold around the victim. Digestive juices are secreted by glands on the leaf surface. The products of digestion are absorbed and utilized by the plant.

Butterwort (*Pinguicula vulgaris*) is found in boggy spots in the coniferous forest of the Northern Hemisphere but in Saskatchewan known only from Prince Albert. The handsome purple flower, surmounting a 2 to 3 inch scape, is violet-like in form and color. Its leaves are in a basal rosette, the upper surface being greasy to the touch as if buttered, hence the name Butterwort. The leaf bears two types of glands—one secretes a sticky mucilage on which small insects adhere and the other glands secrete digestive juices which also absorb the resulting nitrogenous sub-

(Continued on page 18)

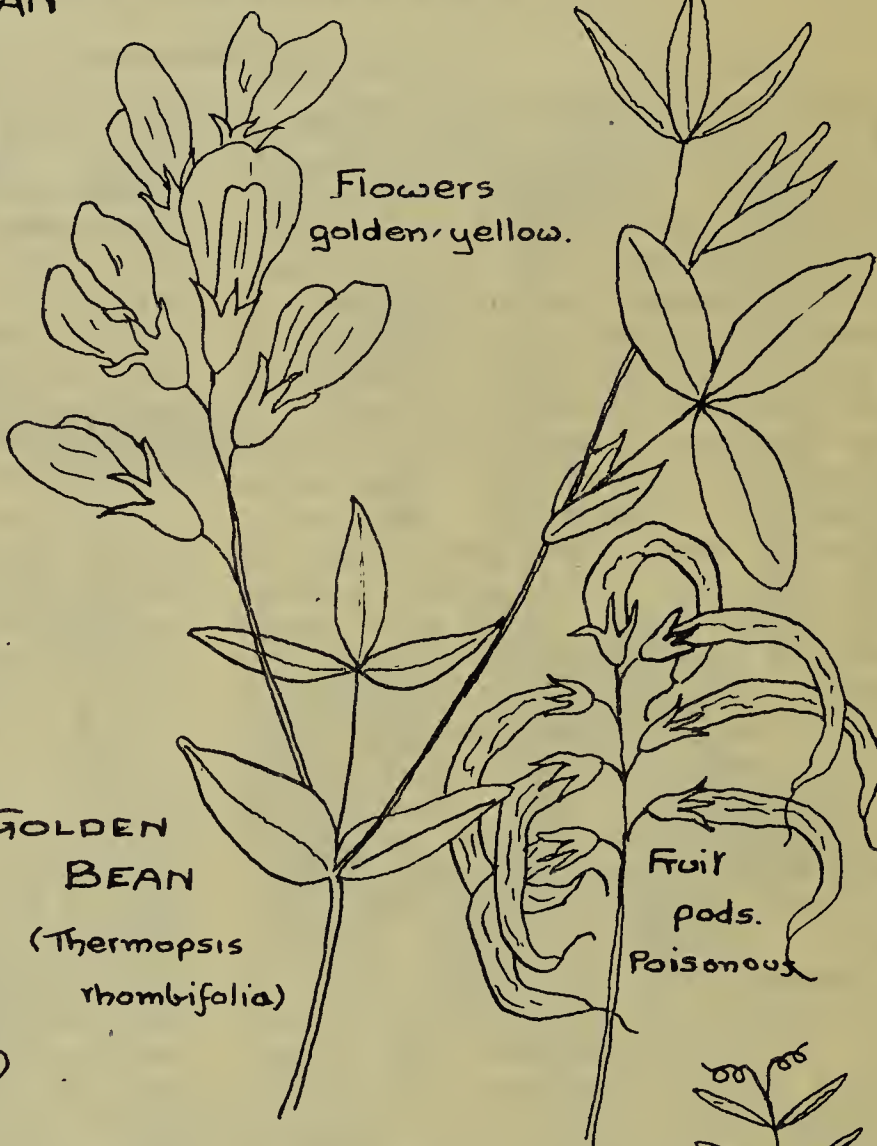
MORE SASKATCHEWAN LEGUMES.

Flowers purple or white.



PRAIRIE CLOVERS  
(*Petalostemon* sp.)

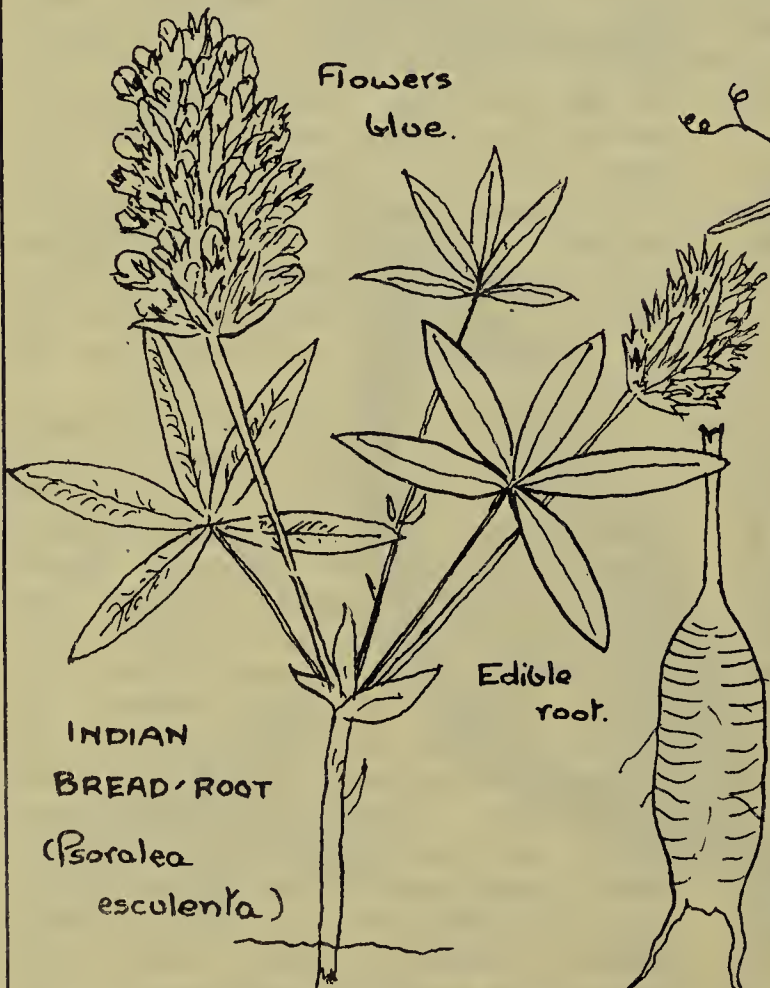
Flowers golden-yellow.



GOLDEN BEAN  
(*Thermopsis rhombifolia*)

Fruit pods.  
Poisonous

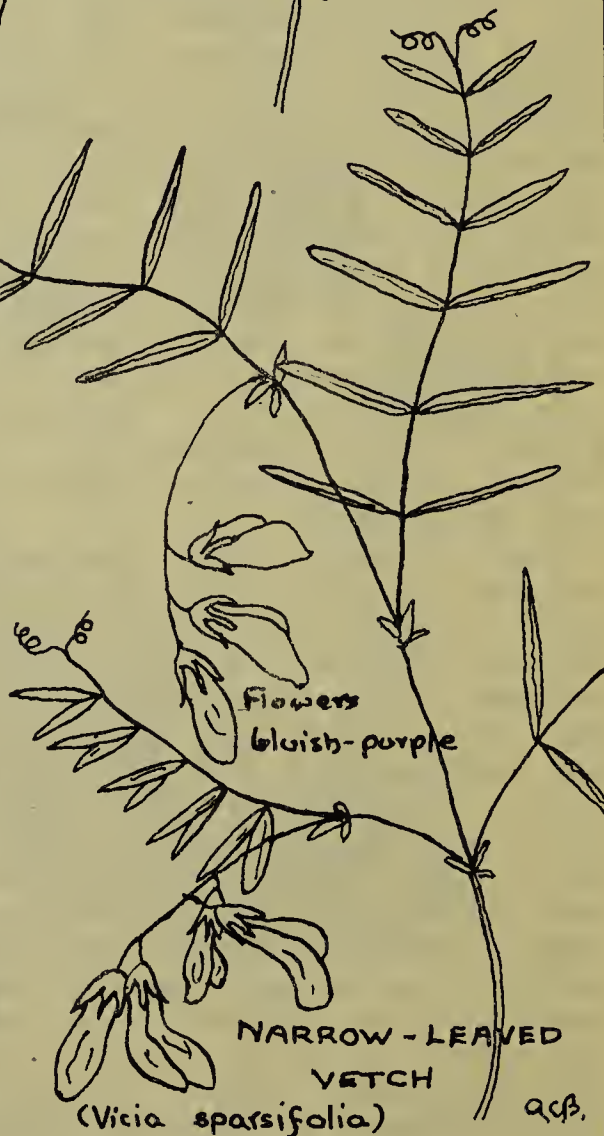
Flowers blue.



INDIAN BREAD-ROOT  
(*Psoralea esculenta*)

Edible root.

Flowers bluish-purple



NARROW-LEAVED VETCH  
(*Vicia sparsifolia*)

qcb.



## More Saskatchewan Legumes

Arch. C. Budd, Swift Current, Sask.

PETALOSTEMON (Prairie-clover) genus.  
3 species.

Low growing, often prostrate, perennial herbs, with odd pinnate, glandular dotted leaves. The flowers are borne in dense spikes at the ends of the stalks and the tiny flowers have 5 stamens united into one bundle.

1. Flowers white; calyx tube smooth.  
(1) *P. candidus*.  
Flowers rose or purple; calyx hairy. 2.
2. Leaflets nearly linear, usually 3 to 5 per leaf.  
(2) *P. purpureus*.  
Leaflets oblong, silky-hairy, 7 to 17 per leaf.  
(3) *P. villosus*.

(1) *Petalostemon candidus* (Willd.) Michx.  
WHITE PRAIRIE-CLOVER

A plant from 8 to 18 inches high, the leaves bearing from 7 to 9 linear-oblong leaflets from  $\frac{3}{8}$  to 1 inch long. The white flowers are about  $\frac{1}{4}$  inch long and borne in compact terminal spikes. Quite common on dry prairie and eroded hillsides in the southern parts.

(2) *Petalostemon purpureus* (Vent.) Rydb.  
PURPLE PRAIRIE-CLOVER

Similar to the preceding species but with shorter leaflets, 3 to 5 to a leaf. The flowers are red or purplish and the plant is very common on dry hillsides throughout the entire southern prairies.

(3) *Petalostemon villosus* (Nutt.)  
HAIRY PRAIRIE-CLOVER

A densely hairy plant branching from the base, with 7 to 17 closely packed leaflets per leaf, each from  $\frac{1}{4}$  to  $\frac{1}{2}$  inch long. The flowers are pink or reddish-purple. Occasionally found in the southern sandhill areas.

PSORALEA (Bread-root) genus. 3 species.

Glandular dotted, perennial herbs with palmately compound leaves. The flowers are in spikes or racemes and the fruit are one-seeded pods. The roots of these plants were used as food by the Indians.

1. Plants with tuberous roots; the flowers in a short dense spike. (2) *P. esculenta*.  
Plants without tuberous roots; flowers in racemes or short, interrupted spikes. 2.
2. Flowers blue in few-flowered, interrupted spikes; leaves silvery. (1) *P. argophylla*.  
Flowers in dense short racemes and whitish.  
(3) *P. lanceolata*.

(1) *Psoralea argophylla* Pursh.  
SILVER-LEAF

A much-branched, silvery-haired plant from 1 to 2 feet high. The leaves bear from 3 to 5 obovate leaflets and the blue flowers are borne in clusters on interrupted spikes. Quite common throughout the southern parts, especially in slightly moist places.

(2) *Psoralea esculenta* Pursh.  
INDIAN BREAD-ROOT.

A low, stout, short-stemmed plant growing from a large, tuberous, starchy root to a height of from 4 to 18 inches. The plant is loosely hairy and the leaves bear 5 leaflets. The flowers are blue but not much longer than the green sepals and are borne in a dense oblong

spike. Fairly common on sandy banks and hillsides in the south and the roots were made into flour by the Indians.

(3) *Psoralea lanceolata* Pursh.  
LANCE-LEAVED PSORALEA

A semi-prostrate plant from 6 to 15 inches high with glandular-dotted yellowish-green stems and leaves. The tiny flowers are bluish-white and borne in short dense spikes and the lemon-shaped, one-seeded pod is about  $\frac{3}{16}$  inch in diameter. The leaves bear 3 leaflets. This plant has very long, stringy roots and is a plant only of the sand-hills, where it is often the dominant species.

THERMOPSIS (Golden bean) genus. 1 species.

(1) *Thermopsis rhombifolia* (Nutt.) Richard.  
GOLDEN BEAN

An early flowering perennial from 6 to 20 inches high, from running roots, usually growing in large patches. The leaves bear 3 obovate leaflets. The flowers are bright golden yellow, from  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long in dense racemes and bear 10 separate stamens. The long curled fruiting pods are from 1 to 3 inches long and contain 10 to 13 seeds. Children have been badly poisoned by eating the fruit. This is a common spring flower of the southern parts of the province and of the sandy areas in the north.

VICIA (Vech) genus. 3 species.

The terminal leaflet in vetches is replaced by tendrils. They differ from *Lathyrus* in that the style is not flattened and has merely a tuft of hairs at the end instead of down one side.

1. Leaflets broad, elliptic or oblong; tall plants. (1) *V. americana*.  
Leaflets linear or narrowly oblong; plants low. 2.
2. Leaves decidedly hairy, distinctly veined. (3) *V. trifida*.  
Leaves not hairy or veined, plant prostrate. (2) *V. sparsifolia*.

(1) *Vicia americana* Muhl.  
AMERICAN VETCH

A trailing or climbing plant from 2 to 3 feet long, with 8 to 14 ovate, veined leaflets from  $\frac{5}{8}$  to  $1\frac{3}{8}$  inches long per leaf. The flowers are bluish-purple, about  $\frac{3}{4}$  inch long and borne 3 to 9 in each raceme. Fairly common in bluffs and shady places across the province.

(2) *Vicia sparsifolia* Nutt.  
NARROW-LEAVED VETCH

A prostrate, trailing plant with from 8 to 12 narrowly linear leaflets per leaf, varying from  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches long. The racemes bear from 2 to 6 bluish-purple flowers about  $\frac{3}{4}$  inch long. Very common on open prairie in the south and often persisting after cultivation as a weed.

(3) *Vicia trifida* Dietr.  
PUBESCENT VETCH

A plant very similar to the preceding but the leaflets are slightly hairy, strongly veined and a little broader. It is found in similar localities, especially in the south-west, and is confused with the preceding species.

## Bird Migrations and Nesting

By W. Yanchinski, Naicam.

(Editor's note: Mr. Yanchinski is of the opinion that each issue of the BLUE JAY should contain definite records, such as the one that follows, from one area in the province. In respect to this he writes as follows: "I feel that our Society should strive to work out a program whereby some such records would be sent in from different habitat areas of the province. Put together they would represent a comprehensive picture of bird activities from season to season over the whole province. Each issue of the BLUE JAY would then contain some tangible information of permanent scientific value as well as satisfy the casual interest of the individual nature lover, who is always curious to know how his own district compares with those in other parts of the province.

I hope that the coming annual meeting will give due consideration to this matter of assembling and coordinating records of bird migrations, populations, fluctuations, nesting etc."

We invite a full and frank discussion on this subject.)

- |   |  |
|---|--|
| Black-capped Chickadees; present all year around; one nest located. | Harris Sparrows; observed May 7 and 15.          |
| American Magpie; common; nesting.                                   | Vesper Sparrow; May 5; very common.              |
| Hairy Woodpecker; common; probably nesting in the district.         | Clay-coloured Sparrows; May 6; fairly common.    |
| Downy Woodpecker; one individual seen, March 30.                    | Savannah Sparrow; a few noted.                   |
| Yellow-shafted Woodpecker; appeared May 2; six nesting sites known. | Red-tailed Hawk; April 15; nesting.              |
| Pine Grosbeak; common all winter.                                   | Swainson Hawk; April 27; nesting.                |
| Rose-breasted Grosbeak; observed May 20 and 22.                     | Marsh Hawk; a few observed during the summer.    |
| Blackbirds; Brewer's and Rusty first appeared April 26.             | An Accipiter (unidentified); occasionally noted. |
| Redwing Blackbirds; nesting in large numbers.                       | Least Flycatcher; May 6; nesting.                |
| Yellow-headed Blackbirds; one pair noted.                           | Phoebe; April 26; several nesting.               |
| Cowbirds; May 8; common.  | Eastern Kingbird; May 18; very common.           |
| American Crow; March 29; very common.                               | Robin; April 20; very common.                    |
| Mountain Bluebird; April 18; very common.                           | Baltimore Oriole; May 17; few nesting.           |
| Ruffed Grouse; fairly common; three nesting pairs known.            | Grey-chested Thrush; May 14.                     |
| Sharp-tailed grouse; very common.                                   | Verry Thrush; June 17, July 23.                  |
| Hungarian Partridge; very common.                                   | Olive-backed Thrush; August 22.                  |
| Sparrows—Redpoll Linnet; common in winter; last seen April 25.      | Common Shrike; May 5, nesting.                   |
| Slate-coloured Juncos; observed May 8 and 10.                       | Tree Swallow; May 7.                             |
| Snow Buntings; common in winter; last seen May 6.                   | Barn Swallow; May 25; common.                    |
| Tree Sparrows; observed April 21, May 2.                            | House Wren; May 20; most common of all birds.    |
| Song Sparrows; April 25; very common.                               | Yellow Warbler; May 15; common.                  |
| White-throated Sparrows; May 5; no nesting site known.              | American Bittern; May 18; several nesting.       |
| White-crowned Sparrows; May 4; no nesting site known.               | Western Meadowlark; May 17; several nesting.     |
|   | Horned Lark; March 25; common.                   |
|   | Pipit (probably Sprague's); May 4.               |
|   | Lapland Longspur, May 17.                        |
|   | Ruby-throated Hummingbird; May 27; nesting.      |
|   | Nighthawk; May 26; nesting.                      |
|   | Cedar Waxwing; observed all year round.          |

Bohemian Waxwing; appeared occasionally.  
 American Goldfinch; June 3; nesting; common.  
 Pine Siskin; from June 5 to August 25.  
 Black Tern; June 4; very common.  
 Common White Tern; a few observed.  
 Horned Grebe; June 2; one known nesting pair.  
 Coot; very common.  
 Ducks, Mallard, Teal, Canvasback, Ruddy, Pintail; April 6.  
 Horned Owl; all year round; nesting.  
 Long-eared Owl; nesting July 14.  
 Catbird; June 10; quite common.  
 American Redstart; a flock appeared, August 25.

## Silent Wings

By Doug Gilroy

**T**HE MOST of us know that owls, due to the way their feathers are formed, are very silent fliers. But you never know just *how* silent, till you have one land on the top of your head.

I was climbing up an ash tree which harboured the nest of a Great Horned Owl. The old owl was nowhere to be seen, so about half way up I paused, standing in a crotch to rest and also to admire the scenery. While I was drinking in this owl's-eye view of the country I was suddenly brought back to reality by such a terrific blow on top of the head that it very nearly knocked me off my perch. What in the world struck me! It felt as if someone had dealt me a blow with a coil of rope—yet it flashed through my mind that there was no one else in that tree.

When I looked up, there was Mrs. Owl, just about to land in a tree some distance away, and she was going in a straight line away from me.

I could scarcely believe that it was she who had struck me! Not one sound had I heard to warn me—not even the touching of a twig—and she had to fly through several branches to get at me. Now I can fully realize what little chance a small mammal or fowl has. A rabbit is feeding on tender bark. He relaxes a second—wham!—no rabbit!

## Baby Birds of 1951

Elizabeth Barker, Regina

**T**HE 1951 bird nesting season is almost at an end and the birds are moving south again. Many young birds are still accepting hand-outs from their indulgent parents, while a much larger number are now drifting around alone, or living in larger family groups on a self-supporting basis.

Taken as a whole it appears to have been the most successful year of my three years residence here in regards to rearing to maturity of young birds, although only a remnant have seemed to survive from each nest in comparison to the given number of eggs laid by each species. It shows, or should show a slight increase in the total bird population if their efforts have been so successful in other places.

Around the yard of my home and in the close vicinity I have noticed the following; Three broods of Meadowlarks produced a total of four young. A pair of Vesper Sparrows took up residence in the yard. Four or more clay-coloured Sparrows nested close by. The young of Tree Swallows, Common Kingbirds, Arkansas Kingbirds all appeared in my yard and garden. Young Goldfinches and baby Cedar Waxwings have also put in an appearance.



F. L. Beebe



## The Bat

By Arthur Ward, *Swift Current*

**T**HE BAT, so unpredictable, is observed in the most unusual places. I have seen him hanging head downward under the eaves of granaries. Once, during the time when the old grain binders were in use, on turning the cut grain up into the packers, up came a bat into the sheaf. Before it could be touched it soared away, high up into the sky. They can be seen in the dusk hovering around the intake airshaft of coal mines and will become drawn down the shaft by suction. Often have I placed my hand into one particular hole, when we were privileged to visit the workings below, and would always find two or three bats.

But when you are seated comfortably reading at home in the living room, and a bat suddenly makes its appearance and commences to give a demonstration of

its sensitiveness in approaching objects, there is need of some explanation.

Such was the case about 10 p.m. on the night of June 5. Where the bat came from is a mystery. It would fly under the furniture and around the room, then alight on the curtains and take off again until finally we opened the door and allowed it to go. We have not the slightest idea how the bat gained access to the house.

Radar equipped, the bat avoids obstacles with ease, using its tail membrane as an undercarriage, curved to catch insects and carry its young. The Brown Bat, one of about two thousand species in the world, is as agile on the wing as most birds and drinks water while it flies. Though it is not blind, it is more dependent on its ears than its eyes.

## A Fisher at Hazelcliffe

By Mrs. Bert Ford

**A**BOUT the first of June a neighbour of ours who lives near the banks of the beautiful Qu'Appelle Valley, saw what he thought was a porcupine in an oak tree twelve feet from the ground. As porcupines in these areas are quite a menace to livestock, he shot the animal. On examination he discovered his error. On writing to the Provincial museum he was informed that the animal was a Fisher.

According to people who have lived here over sixty years, this is the first Fisher to have been seen in this district. It was sent to the museum where it was reported that if it had not escaped from a fisher ranch in northern Saskatchewan, it was from its native haunts. The animal is to be mounted by the museum.

## CARNIVOROUS PLANTS

(Continued from page 13)

stances. The leaf-margins are usually curled; this is increased after insects are trapped. Occasionally a leaf-margin may roll over far enough to cover up its victim. Laplanders are said to use the Butterwort leaves to curdle milk.

Three species of Bladderwort are found in the province, namely; Greater Bladderwort (*Utricularia vulgaris*), Flat-leaved Bladderwort (*U. intermedia*) and Lesser Bladderwort (*U. minor*). They are yellow flowered, rootless plants which live suspended in the water and are provided with bladders to entrap small animals and in addition, give the plant buoyancy. The bladders are always pale green, partially transparent and each is provided with a trap or valve which allows animals to enter but not to escape. The trapped animals are chiefly small shell-fish (crustaceans); but larvae of insects, worms, etc., are also imprisoned in the bladders. Death and digestion of the unfortunate creatures soon follows.

## 'She's Gone to Sleep' A Moving Operation

Stuart P. Jordon, Saskatoon

By Cliff Shaw



**T**AVERNER WRITES, "It was very interesting to watch a captive specimen open galls on poplar leaves. Seizing the fleshy tissue with the bill tips so that the points crossed within the mass, it gave a little twist of the head that split the gall wide open and the aphids within were removed with the tongue." — What a unique piece of equipment for food getting.

As you have probably already guessed, the incident I would like to relate is about the Red Crossbill—truly an intriguing and attractive little bird.

I was sitting in my neighbour's living room, admiring the beautiful picture window, when a little bird flew straight into the pane. The impact, even for a small bird, had not seemed very hard, but feeling concerned I got up and looked out the window. A female Red Crossbill lay on the ground, her pink breast upturned to the sky. I went outside and picked her up. Her neck had been broken.

About a week ago I had seen a pair of crossbills with some young in an elm, in front of this very house. The young seemed able to fly fairly well, so I'm glad they will not likely face starvation, due to her death.

My three year old daughter and I took the broken little body to the back yard for burial. As I placed her in her grave and covered it with earth, my little girl said: "She's gone to sleep, hasn't she Dad—she'll never fly any more—not for a long, long time, will she?"

**W**HEN Frank Doyle, a farmer of the Leech Lake district near Yorkton, saw a duck and two drakes move a nest of eggs from one location to another he could scarcely believe his eyes. But Manitoba authorities of Ducks Unlimited have informed Mr. Doyle they have at least one other record of a duck seen carrying an egg in its bill.

Mr. Doyle said that a few weeks ago, while plowing, he disturbed a Shoveller's nest with six eggs in it and had moved the nest to safe ground. The duck was on the nest when Mr. Doyle made the next round of the field, but on his second trip he noticed two drakes and the female bird flying "in a strange formation" towards a nearby slough, and the six eggs were gone.

His curiosity aroused, Mr. Doyle watched where the birds landed and on investigation found a hollow in the ground containing six eggs. As the afternoon advanced the birds removed all the feathers from the old nest and re-lined the new one.

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### Appreciation

**T**HOSE gifted contributors to the BLUE JAY gave a fine display of various nature topics in the June issue.

So interesting in expression, that all were worthy of our thanks. Interesting and revealing was the account of the birds of the Alaska Highway country by Eva Mudiman. Our attention was drawn to the vast sanctuary of that region, with the surprisingly large number of species and the inclusion of the Varied Thrush, which we seldom see. A glimpse of some of our most wonderful heritage as depicted by W. Yanchinski in his article of "Historic Sites"; the splendid descriptive work on Archaeology by Allan H. Hudson; the "Passing of the Buffalo" by A. J. Breitung—all of these are packed with enjoyment and worthy of consideration.

—Arthur Ward.

## The Alaska Birch

A. J. Breitung



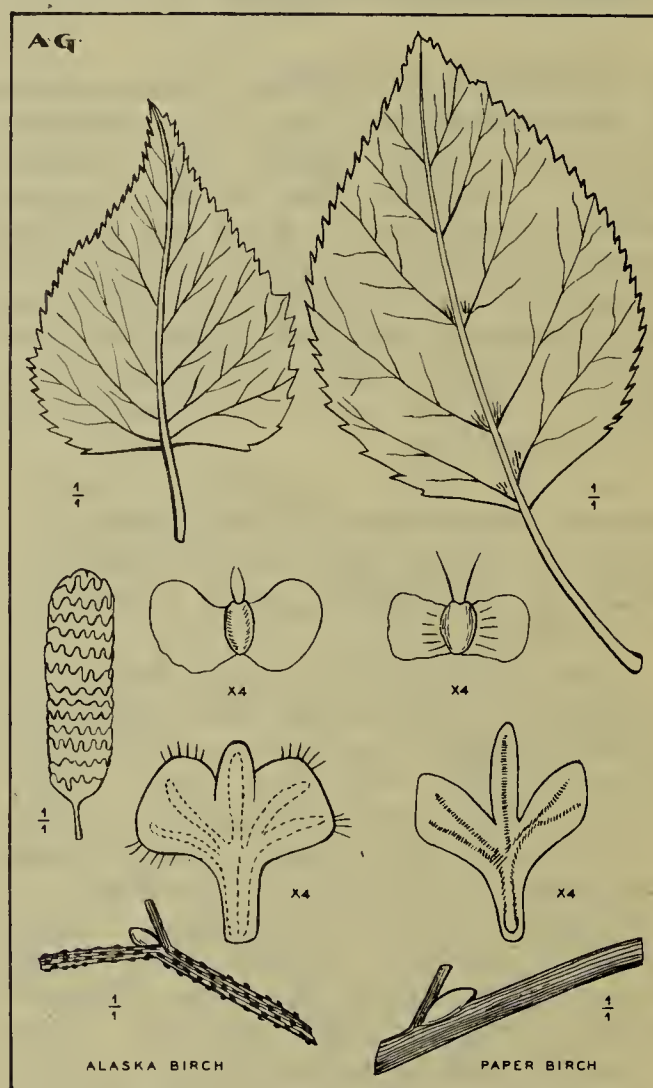
**D**URING the past several years I have studied the Alaska birch (*Betula resinifera*) in north-western Canada. Some botanists consider it a variety of the paper birch (*Betula papyrifera*). However, a number of consistent characters distinguish the Alaska birch as a distinct species, viz., small, bushy tree 15 to 30 feet high; twigs covered with resinous glands; leaves 1 to 2 inches long, glandular resiniferous, smooth and shiny on both sides; central lobe of the fruiting bractlets only slightly longer than the side pair. It occurs on sandy soil and muskegs in the forested region from Alaska to Manitoba.

In contrast, the paper birch is a large tree up to 75 feet in height; twigs without glands; leaves dull-green, 2 to 4 inches long, hairy in the axils of the veins beneath; central lobe of the fruiting bractlets extending considerably beyond the side pair. It occurs in mixed forest and on river banks from Newfoundland to British Columbia.

In the field, the Alaska birch can readily be distinguished from the paper birch by its lower stature, more slender and graceful habit,

resinous glandular twigs, and comparatively small, dainty leaves which are nearly as broad as they are long. The range of the Alaska birch is, in general, north of the paper birch. Their habitats are also different, as already stated. Never have I found both species growing together.

In height and general appearance, the Alaska birch closely resembles the gray birch of eastern North America.



## Timber Wolves

**W**ILLIAM NIVEN reports that two Timber Wolves were caught in the vicinity of Sheho last winter, and that another was seen between Sheho and Margo. Knowing that this is unusually far south for them, he wonders what brings this wolf so far from its usual haunts. Perhaps game is getting scarce in the north.

## Autumns Brave Show

By L. T. Carmichael

The advent of spring each year brings with it nature's favorite color, green. The slender blades of grass on the meadows and roadsides, the unfolding buds on the trees and shrubs; the tender foliage of awakening flowers, are heralds of another season, hopes of better things to come.

We love the green in all its myriad shades and hues. It is a color of which the eye never tires—Mother Nature has seen to that.

But when autumn days roll around, the foliage of our trees and shrubs, as if envious of the admiration accorded to brighter hues, bursts forth itself in flashing attire of red and gold and purple. It is not the swan's song of death but a gala farewell to summer; a joyful reminder that life persists and that after a period of rest it will awaken again in all its verdant splendor.

The autumn colors of the west may show nothing so brilliant as the flaming sugar maple or blazing sumac of the east, yet a drive along the Wascana or Qu'Appelle valleys will now display a vista of blending and contrasting colors unequalled anywhere.

There, one will see clumps of the pure gold of the trembling aspen, backed by the still dark green of the black poplar and shining leaves of the willow. The pin-cherries dressed in crimson; the maroon of the elder; the red and purplish tinge of the rose bush, all blend in with the yellows and browns of the smaller shrubs. Over in the hollow the bronze leaves of the green ash are shining in the sunlight as they flutter noiselessly to the ground and settle among the flaming scarlet of the poison ivy. Here, too, one may see the white-limbed birches, standing like nymphs in the shower of their own golden hair.

Yet one need not leave the city to admire these changes in nature. The northwestern poplar, the ash, the Manitoba maple and the elm are a blaze of glory showering leaves around the heads of pedestrians and carelessly dropping their shining gold pieces into the gutters at their

feet. What is more brilliant than the crimson of the virginia creeper, the dark red of the cotoneaster or the mixed reds, yellows and greens of the Ginnala maple.

What is the real reason for all this display of splendor? How do the trees part with their leaves on the approach of winter? Deciduous trees and shrubs prepare to drop their foliage by forming a layer of hard-walled cork cells at the base of each leaf. This layer serves to cut off the leaf from the twig or branch on which it grows. Before this layer of cells is formed, most of the food and living substance of the leaf is drawn into the other parts of the plant. Chlorophyll, the vital green granules of the leaf, disappears, making way for the latent yellows and reds.

We hear much of the work of Jack Frost as he paints the leaves of September and October, yet frost has nothing to do with the change in color. In fact, after a sharp frost, the leaves will wither and die and fall to the ground without beauty or tint. On the other hand, as light is necessary to implant an image on a photographic plate, so is it essential to the production of reds and purples. Continucus cloudy weather will destroy the display while an average amount of moisture and sunny autumn days will dress up the trees in all their glory.

Three chemicals, embedded within the cells of the leaf, are responsible for the fall tints. The basic one is xanthophyll, the same true dye that is found in the yolk of an egg. This is entrenched deep in the cells of the spongy layer and gives rise to most of the yellows. It is affected very little by sunlight. These pigments are always present in the cells, but are masked from our sight all summer by the rich green of the chlorophyll. Many leaves, such as the waxy broad ones of the northwestern poplar, the elm and the aspen, contain no other pigment after the disappearance of green.

The reds and purples are due to anthrocyanins, water-soluble stains found only in the outer cells of cer-

tain leaves. Just as acids turn litmus paper red, so sunlight brings out this color on the surface of the leaf. Often the yellow below will shine through the red at the surface, painting it a brilliant orange. The part of a maple leaf, overlapped by another one, will be yellow while the exposed portion will become a study in shades of crimson. The brown color in leaves is due to the presence of tannin. This dye, coupled with the yellow of xanthophyll, gives our green ash its blending shade of bronze and gold.

Poor rocky acid soils are conducive to bright colors of red and orange. The acids assist the sunlight in bringing to view the latent hues of the anthocyanins. Sugar in sap is another factor especially inductive to reds. The king of autumn foliage is the sugar maple of the east and a close runner-up is the Ginnala maple which grows on Regina lawns.

It has often been stated that it is essentially death that causes all this brave show, but to the writer it is not goodbye but au revoir.

## Routes of Migration Change

Arthur Ward

**O**FTEN we look back over the years and wonder why certain species of birds change their route of migration. During the Twenties, the Black-billed Cuckoo never failed to stay with us. Two of these were banded in the year 1926. The Cliff Swallow, too, often dallied around. When the P.F.R.A. Highfield Dam was under construction, one of the towers was very thickly plastered with nests of a colony of these birds, built during the noise of the accompanying traffic. The foreman told me afterwards that their persistence finally gave way to the constant vibration of the passing vehicles. They departed and never returned.

On the other hand we have noticed the presence of the Fox Sparrow being mentioned in the BLUE JAY as a frequent visitor in some districts. During the time of our stay in the Swift Current district, we have never seen a Fox Sparrow.

## October

By Allen E. Woodall

What can we ask more than a day  
That sets gold leaves against the  
gray  
Of rain worn walls, or on a sky  
Bluer than lakes where white gulls  
cry,  
And calls the yellow sunlight  
through  
Thin branches groping for the blue.





## Our Pet Chipmunk

Mrs. F. Bilsbury

WELL, all you young people will by now want to hear more about the various pets that we have had. Peter is still about the farm with several other rabbits. He will sit quite still when we call him. Johnnie is free to swim all over the large slough and we think he has set up housekeeping.

But now for the story of our last pet, and I think the one we loved best of all. Why?—because he was crippled and so very patient. One cold, dull, very damp day, Gary and Aletha came from school in great excitement. "Guess what we have in our lunch kit?" Of course I guessed all wrong. After some fumbling among lunch papers, I was handed a very tiny, very dirty, chipmunk. "He is hurt so maybe you can sort of fix him up mother." This from my two hopefuls. Well I washed him and discovered that one side of his face was torn off—the upper portion from his eye to his nose. We made him a nest in an old homemade bird cage with fine sweet hay and some soft rags which he soon arranged to suit himself.

Every day I dressed his sore face and never once did he struggle or try to bite. He was unable to utter any sound other than a faint sort of whistle. He loved Aletha best of all,

and would scamper along her arm to her shoulder and up on top of her head, where he would peep from her curls with his one good eye — the other was blind. He showed the urge to store food by stuffing what he did not eat in his one cheek and then appealing to someone to carry him to his box. He knew his name which was "Chippie" and would come at once when called.

He slept a great deal for a time but did not hibernate. His table manners were excellent so he was allowed on the table at breakfast time. There he was given one teaspoon of milk and a large saskatoon. He had oats in his box.

Well, I am sorry to say that when the spring break-up came he began to fail and his old injury took over. He became totally blind in his one good eye. The torn part of his face became very bad and he lost more skin around the eye. He seemed so cold and wanted someone to hold him in his hand. Then one morning we found him curled in his nest, dead. We miss him still, as he was such a lovely little fellow throughout the six months or longer that we had him.

Perhaps in a future letter to you I will tell about the House Sparrow who sang.

### Bird Chatter

By E. K. Jones, Raymore.

THE BIRD HOUSE built last spring for the Bluebirds has recently been taken over by the House Wrens, who have just hatched their young. Such busy little birds they are — chirping and scolding everyone who passes.

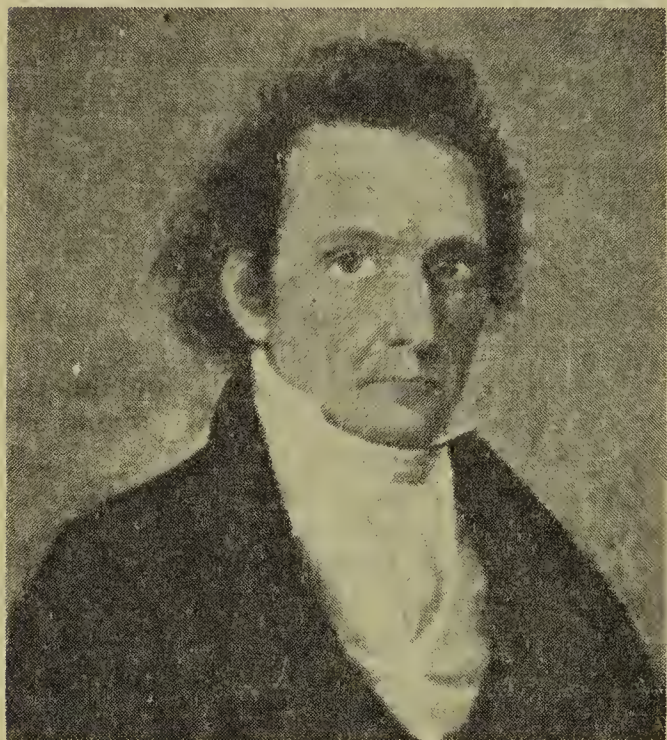
A Great Blue Heron was seen on our dugout, August 24—a rather shy individual.

I was shocked to read that Mr. Knox, of Clair, has such a dislike for the Catbird. Although it does upset other birds' nests, I do not feel that it should not be admired. The plumage and song of the Catbird is one of the finest sights and sounds ever to be heard.

### The Naturalist's Library

HANDBOOK of NORTH DAKOTA PLANTS. By O. A. Stevens, North Dakota Agricultural College, Fargo, N.D., 324 pp., 308 illustrations, 1950. Price \$4.50. This manual provides keys and descriptions to all the flowering plants and ferns, totaling 1143 species, known to occur in North Dakota. It is a most useful book to those seriously interested in the vascular plants of North Dakota and adjacent regions of the United States and Canada.

## IN MEMORIAM



**T**HE YEAR 1951 has been designated the Audubon Centennial in memory of John James Audubon who dedicated his life to the monumental task of producing 435 separate paintings of birds. They are an

enduring monument to his genius: but his name may outlive his works because it has become the symbol for love of nature, love of country.

To commemorate the centenary of the famous naturalist's death twenty-four of the most beautiful birds have been portrayed in full-color stamps and have been issued recently by the National Audubon Society. It is recommended that the centennial stamps be used to decorate letters, envelopes and packages in order that the Audubon paintings will receive during the centennial year the public attention they merit.

A set of these stamps has been sent to the Editor of the BLUE JAY. They are very beautiful. Proceeds from the sale of Audubon Stamps will be devoted to the conservation work of the National Audubon Society. They are being sold at a rate of two sets for one dollar and are available from the headquarters of the Society at 1000 Fifth Avenue, New York 28, N.Y.

### *Fall Migration of the Mourning Dove*

In order to fulfill the urgent need for more information about the fall migration of the Mourning Dove, the Fish and Wildlife Service is appealing to all of its bird migration observers to pay particular attention to this species for the remainder of the summer and the coming fall.

Since the Mourning Dove winters, at least in small numbers, through a great part of its breeding range, there is relatively little information on file regarding the start of the fall migration, the peak of abundance in fall, and the departure of the last migrating individuals. This information is vitally important in regulating hunting in the states where the dove is a game bird.

If the Mourning Dove occurs in your neighborhood, along the route which you travel in going to work, or in areas which you have occasion to visit every week or so, the Fish and Wildlife Service would be most appreciative of any information which you may be able to supply on changes in abundance during the next four or five months. Changes in temperature and wind conditions at the time of population changes should be noted in detail. If it is at all possible to cover a certain route daily or weekly, and keep a record of the number of doves you see on each trip, this information, when combined with similar data secured by other observers, should give exactly the type of information which is needed to ensure the adequate protection of the species. Should you be unable to make regular observations, you can still contribute to the study by recording any changes in abundance that you notice at any time during this period.

Please mail your completed dove count form or other notes by December 1, or earlier if the migration is entirely over before that date. The data received from co-operators will be summarized, and a copy sent to all those who have contributed to the study.

Send this information to the *Blue Jay* and it will be all sent together to: Chandler S. Robbins, Biologist, Distribution and Migration of Birds, Branch of Wildlife Research, Patuxent Research Refuge, Laurel, Maryland.

# THE ANNUAL MEETING

The annual meeting of the Saskatchewan Natural History Society will be held at the Provincial Museum, Regina, on Friday, October 26. Registration will be from 9.30 to 10 a.m.

Plan to take a day or two off and attend this meeting. Those who came last year were enthusiastic about the success of the three sessions.

The Executive is arranging a full and interesting program. Illustrated and other lectures, as well as special exhibits, will be the chief feature of the sessions, morning, afternoon and evening. The business meeting and election of officers will take place from 2 to 4.30 in the afternoon.

Mark the date on your calendar — Friday, October 26.

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## *Are Your Dues in Arrears ?*

It is very important that all 1951 subscription fees be paid as soon as possible. These fees were due and payable on January 1st of this year.

The Society is in a critical period financially. Increased costs of supplies, publication and postage are straining our funds to the limit. The total cost of *each issue* is now in the neighbourhood of \$175 and it may soon reach \$200.

Our membership goal at the present time is 1000. We still have less than 600 regular members. In addition, 200 copies of each issue are distributed to employees of the Department of Natural Resources for circulation, by the director of the provincial museum. These have been contracted for at a reduced price. It was with great regret that we were compelled to drop 40 names from our mailing list last year, whose arrears dated back to December 31, 1949.

We appeal to members to endeavour to increase our circulation and to retain our present membership.

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## *A Christmas Gift Suggestion*

Why not give a year's subscription of the BLUE JAY to a friend interested in nature and conservation, or to a school library?

As a special premium each such new member will be given a copy of our Christmas issue, free, in addition to the four issues for 1952—five copies of the BLUE JAY for one dollar. That is a Christmas suggestion worthy of consideration by every member.

The same offer holds good for any new member subscribing before December 1, 1951.

MRS. WILLIAM ANAKA  
SPIRIT LAKE, Sask.

# The Blue Jay

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Edited by Lloyd T. Carmichael

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The BLUE JAY is published quarterly at a yearly subscription rate of one dollar. Anyone interested in any phase of nature will be a welcome member of this organization. All subscriptions will start and terminate on the first day of January.

The deadline for the reception of material to be printed will be March 1, June 1, September 1 and December 1. All matter intended for publication in the BLUE JAY should be written *as it is to appear in the magazine*.

Mail all communications to the Editor at 1077 Garnet St., Regina.