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## THE VICTORIA NATURALIST



Allaw Brooks.
published by the

# THEVICTORIA NATURALIST 

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THE VICTORIA NATURAL HISTORY SOCIETY
Vol.25, No. 7 March, 1969

## COVER PICTURE

## Reproduced sketch by Allan Brooks <br> COVER STORY <br> ALLAN BROOKS <br> by David Stirling

This year, 1969, marks the centenary of the birth of Allan Brooks, one of America's foremost naturalists and wildlife artists. He was born in Etawah, India on February 15, 1869, the third son of Mr。\& Mrs。William Edwin Brooks of Newcastle-on-Tyne, England. W.E. Brooks was a keen naturalist so that it is not surprising that Allan developed an interest in natural history almost before he could walk. As was the custom with English families living in a far corner of the Empire, young Allan was sent to school in England where he met many well known naturalists of that time including John Hancock who taught him egg-blowing, butterfly collecting and botany.

The Brooks family moved to Ontario, Canada, to take up farming in 1881. This frontier country, abounding in birds and mammals, presented a great opportunity for a young naturalist.

In 1887, when Allan was 18 , the family moved to Chilliwack, British Columbia. After a short stint at farming, Brooks became a collector and hunter. He travelled widely in British Columbia, to Vancouver Island, the Cariboo and the Selkirk mountains. Sketching and painting took up much of his time now and his illustrations were used in Dawson and Bowles' Birds of Washington.

After the war, in which he served with the Canadian Expeditionary Force, Major Brooks became a full time artistillustrator. After 1925, his home was Okanagan Landing and during the winter months, when not engaged in seeking birds and mammals in their natural habitats in such diverse places as Grand Manan, the Everglades, the Queen Charlotte

## TUNNEL EXPLORING

Islands and New Mexico, he had another refuge in Comox, Vancouver Island.

His bird paintings illustrated P.A. Taverner's Birds of Canada. With the death of the great Louis Fuertes, he completed the illustrations of Volume 111, Birds of Massachusetts. Brooks' paintings from Birds of Canada were used in the Victoria Naturalist from 1948 to 1953. One of his major tasks was illustrating and helping to write a series of articles on the birds of North America for the National Geographic. This series included virtually all the bird species found north of Mexico.

Always an independent man, Allan never worked for a museum or a gevernment organization. From 1920 until his death in 1946 he was a prominent freelance artist, naturalist and writer - one of the few. Over the years he built up a study collection of over 8000 bird skins. The scientific brooksi has been affixed to the names of several races of birds and mammals. Of interest to local naturalists are the savannah sparrow that breeds here and the navigator shrew which has been found at G®1dstream.

Perhaps he was best known for his bird paintings but he was also accomplished in the art of drawing mammals.

I never met Allan Brooks but his bird pictures started me on the nature trail at the age of 12. My first aids to the identification of the northern Alberta birds were the large bird cards found in the brand of tobacco my father smoked. A little later, I was wealthy enough to purchase Taverner's Birds of Canada, and finally I obtained several copies of the National Geographic series. These I particularly like for the almost photographic portrayal of the habitat with each bird. In "Far Flying Wildfowl and their Foes", the Trumpeter Swan stands beside a lonely lake in Northern British Columbia. In "Auks and their North1and Neighbors" the tufted puffin is shown in a typical misty coast scene. When I look at one of Brooks' bird paintings, I see the realistic portrayal of a bird in its natural environment - a scene which becomes immediately familiar to me.

Recently I was privileged to go into the tunnel that has been cut under the mountains and lakes to bring water to the Greater Victoria area. Eight and a half miles long and running from Japan Gulch to Sooke Lake, the tunnel goes under Wolf and Jackfish Lakes and was started from both ends. When the two tunnels met, they were less than six inches off centre. The bore is eight feet in diameter when lined with cement.

In places where the tunnel had to be shored with timbers, I noticed clumps of pure white fungi growing, No light reached the fungi as it was too far from the portals. The rock formation through the mountain is soft "shale" that in places was smooth as soapstone. As no fossils were found, this would probably indicate that the shale was laid down many millions of years ago and before life appeared upon the earth.

The operation of lining the tunnel with cement is fascinating to watch. The forms holding the cement in place are made of steel and can be collapsed so that they may be moved forward. Each section is 90 feet long and when in position cannot move by pressure of the cement. As the sections are poured and moved the walls are left as smooth as a table top.

All batches of cement are exactly similar. All ingredients, including water, are weighed accurately. The water is heated to $70^{\circ}$ to ensure that there is not too fast a cooling.

The operation continues around the clock in three shifts. The day shift pours the cement which is taken into the tunnel by "cars" holding eleven yards of cement. These machines force the material behind the forms by hydraulic pressure. The noise of this operation is hard to believe. Each man has a light on his hat and all operating signals are given by lights.

The second shift moves the forms. The third shift does many cleaning jobs and one man goes through the tunnel by motor bike to the top end at Sooke Lake where he services the diesel engine that works the fans supplying fresh air to the bore. So much could be told about the way in which that precious necessity Clean Water is brought to us in southeastern Vancouver Island.

## ARIZONA WINDOWS

Arizona is mostly desert and much of it is rocky and mountainous. The state flower is the blossom of the saguaro cactus, the state tree is the palo verde which, for most of the year, is leafless and lives up to its name meaning "green stick"。 The state bird is the cactus wren. To a visitor the desert plants, the greasewood, the mesquite, the ocotillo and the many varieties of cactus are fascinating. It is a harsh land and most of the shrubs and trees have found it necessary to protect themselves with a great variety of spines and thorns. To a stranger it is definitely unfriendly.

In spite of this, a surprising number of birds and animals thrive in the desert. Of course, where water is available, the desert will grow marvellous crops of cotton, sorghum, citrus fruits, pecans and many other things.

Many of the desert birds are gray-brown in colour and so are inconspicuous. But it is hard to understand why some others are so brilliant. The flaming scarlet of the cardinal, the vermilion flycatcher, the painted redstart, the orioles and tanagers are startling。

There are, of course, many winter residents and the cultivated areas and weedy edges in particular are thronged with white crowned sparrows (Gambels) house finches and lark buntings to mention only a few. If one drives a few thousand feet above the valley floor and into the mountains, it is possible to find the birds of other life zones and greatly extend the number of species readily available.

We were fortunate to have a feeding area outside our cottage window. Every morning the birds gathered there for breakfast. We were thrilled to see there gilded flickers, gila and ladderbacked woodpeckers, cactus wrens, longbilled thrashers, brown towhees, Gambels quail pyrrhuloxias, cardinals, mourning and Inca doves, verdins and lark buntings as well as the more familiar birds. To add to the interest we usually had several cottontail rabbits joining in the feast and one evening we had a visit from two javelina or collared peccaries.

One of the famous birding spots in the Tucson area is Madera Canyon in the Santa Rita mountains. Here, at an elevation of about 5,000 feet there are birds of the upper Sonoran and Transition zones. Some Canadian guests at the Santa Rita Lodge invited us to watch from the comfort of their cottage the birds gathered at the feeders in front of their window. We were able to watch the birds only a few feet away and saw Mexican jays, painted redstart, hepatic tanager, gray-headed and Mexican juncos, bridled titmice, acorn and Arizona woodpeckers, white-breaster nuthatches as well as other familiar birds. This armchair birding with so many new species was fascinating.

Another favourite birding spot is the cattle feeding area at Continental just south of Tucson. There many kinds of blackbirds, cowbirds, starlings and others gather to feed with the cattle. One day, after seeing bronzed cow-birds and boat-tailed grackles and yellow headed blackbirds. I was thrilled to see overhead a flight of turkey vultures and then a group of caracaras.
A. Douglas Turnbull

PORCUPINE AND LYNX
Old time prospectors used to regard porcupine as an ever present emergency ration. Nowadays poor old porky is more or less of a nuisance, but is still an emergency ration for a number of predators. For instance a neighbour, Allen Bittner, told me, "I think I have never seen a panther that didn't have quills in its paws".

Last fall another neighbour, Tom Chignell, was on top of a haystack and had a grandstand view of the following incident. Porky had come into the field for a feed of clover when he was discovered by a lynx which proceeded to pester him. After the usual defence of keeping his back to the aggressor, porky made his way to a tree, the lynx meanwhile giving him no peace. Porky started to climb. When he was up the tree about a foot and a half, the lynx, like lightning struck him a blow on the head, killing him instantly. The lynx then sat down for a few minutes to make sure he was dead before dragging him away.

Adrian Paul,
Kleena Kleene, B.C.

He left in August after some very noisy visitors to the light station. Maybe he will return next summer when the water turns warm enough for swimming. I hope so.

K.C.R.Cehak

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## BOOK NEWS FOR NATURALISTS

| Moore, W, G. | The sea and the coast. |
| :---: | :---: |
| Watts, A 。 | Instant weather-forecasting. |
| Hotton, N. | Evidence of evolution. |
| Clancy, E.P. | The tides. |
| Haskin, L. L. | Wild flowers of the Pacific coast; 2nd edition。 |
| Ballantine, B | Nobody loves a cockroach. |
| Jungk, R.B. | The big machine. |
| Johns, V.P. | She sells seashells. |
| Spinage, C.A. | The book of the giraffe. |
| Fuller, J.G. | The day of St.Anthony's fire. |
| Emberton, S.C. | Garden foliage for flower arrangement. |
| List suppl Circul | Mr.George McBride ept., G.V.P.L. |

## SURVIVAL IN THE SNOW

The unusual severity of this winter caused us all a lot of discomfort but it might be well to remember that to birds and other animals it was a matter of $1 i f e$ and death.

The snow was about a foot deep as I walked through a field one afternoon. Three widgeon were sunning themselves on a patch of ice that edged a small creek. As I approached they half walked, half slid into the water and drifted easily downstream until, coming to another stretch of ice, they slithered out on it and disappeared behind a snow bank. The tranquillity of the scene was shattered, suddenly, by the plummeting form of a large hawk. Two widgeon rose, frantically, and flew away. Seconds later, the red-tailed hawk flew up into a nearby fir tree. It had missed its quarry, apparently, for the third widgeon came walking up the ice and dropped into the safety of the water. It stretched one wing as it awam and I wondered if the wing had been damaged or if the bird was just too shocked to fly. It swam up the creek until it found an overhanging bank where it stayed, close to shore and out of sight.

Next day I returned to the same place, not without misgivings, and there on the creek bank were feathers and blood, indicating that the widgeon had received its "coup de grace" recently as the remains were on top of about four inches of newly fallen snow.

The following afternoon there was a real blizzard of swirling snow. Walking through it, knee deep and powdery was like walking through a cloud. In a spring-fed marshy area, some hundred yards from the scene of the former day's action, were three common snipe feeding in the only area that had somehow managed to stay free of snow. As I made a large circle round the field so as not to disturb them, the hawk attacked again. There was a flurry of feathers and snow and a flash of a red tail as it flew away, again "empty footed". The snipe fluttered about thirty feet and hid themselves amongst the reeds.

The hawk circled several times, high above the fields, uttering its shrill descending whistle and then disappeared, leaving me to ponder the ways of nature.

Could this be the same bird that had stared down at me from its nest as a youngster, in early summer? Then, it had been all white and fluffy with coal-black eyes like
an Eskimo "ookpik". Would it survive the rigours of its first winter and live to complete a year of life and to enjoy, once again, its more normal diet of rodents and snakes?

Terese Todd

## **********

## CLOWN OF A JUNCO

We have a large ornamental plum tree just a few feet from the living-room window. It has an ever-changing population of birds.

Chestnut-backed chickadees visit us regularly. We have half a cocoanut shell hanging open and down for their benefit. We keep the inside of it well coated with peanut butter and they love it. There are other types of feeders in the tree and Oregon juncos come regularly for their treats. Often the juncos are feeding at the same time as the chickadees.

One afternoon I noticed a male junco behaving like a chickadee. He flew up to the cocoanut feeder and, with wings beating madly, he managed to peck a bite of peanut butter and then fluttered down to the branch below.

Having had a taste of this delectable fare, he tried the manoeuvre several more times that day. Once he tried to grasp the edge of the shell and, succeeding for a moment, he hung there upside down.

We have watched Mr. Junco go through this performance many times since then - and we do believe there is really only the one bird who thinks he is a chickadee, or a clown.

Gladys Prior

## JUNIOR PARAGRAPHS

In January, Freeman King gave the juniors a time limit of fifteen minutes in which to write a paragraph on the benefits of snow. Two of the paragraphs are reproduced below.
Benefits of Snow
Entering our life during the winter season, snow brings its advantages and disadvantages. In our forest glades, the snow lies on the ground like a sleeping blanket. It moistens the ground, giving a chance for the soil to become rich with living material for the coming season. The new growth will be Iush and thrive from the benefits of the snow's moisture. The creatures don their winter coats and live a well balanced life as they live a hardy summer and then change to live in a natural winter environment, making them use their instincts to their full ability. People begin to think and understand a little more about Nature's animals. The birds, for instance. People leave them tidbits of food during these months because it is harder than usual for them to find food. The human being begins to realise what effects nature has and the influence she carries. They become more alive and have to use their legs for a change instead of hopping into cars. They are more inclined to get out and shovel or enjoy their winter sports instead of sitting in front of the television. The snow makes sure our rivers and streams will be flowing well, stocking our lakes and other bodies of water with lots of life. This also means our reservoirs will be filled. The snow also brings many impurities down from the air and helps clear the atmosphere.
**********

Jane Moyer
Benefits of Snow
Although at first the advantages of snow seem few, we can find many if we search. Perhaps the most important is that snow and cold kill off the weak. The strong which survive will produce the best offspring. Without such exterminators, nature's fine balance would have broken long ago leaving life extinct. Another benefit of snow is that it brings us in touch with our environment, experiencing some of the hardships the pioneers went through. The average North American does not normally have to battle the elements. Faced with snow and cold we have to fight and make an effort. Then we are living, not merely
existing. Everyone is on the same level with a common problem. We learn to live in harmony with nature and not against it as we often do.

Snow brings the added benefits of an adequate supply of water and recreational facilities such as skiing and tobogganing. Snow brings death and many problems in its wake but it preserves life when it acts as a blanket protecting plants from the frost. To all those who are young at heart, from the child building a snowman to the old man eating icicle tips, it brings wide-eyed wonder. New time a snowfall comes, grin and bear it, it really is doing some good!

Genevieve Singleton Jnr。

## **********

## BEFORE MAN

On page 83, Freeman King describes his visit to the tunnel that has been cut under mountains and lakes to bring water to the Greater Victoria area.

I wonder how many of the Juniors know the story of the great engineer, Brunel, and of how the work of the teredo gave him the idea for a new invention that made it possible to do subaquatic tunnelling through loose and sandy soils. Brunel examined the way in which the teredo, tunnelling through wood, lined its burrow with a hard shelly material. He adapted this principle when, in the nineteenth century, he was trying to build a tunnel under the Thames. He built a "shield" of iron, exactly fitting the tunnel. It was divided into sections each of which could be pushed forward independently of the others. Then the interior was encased with brickwork, just as a teredo tunnel is cased with shell. Teredo tunnels are easy to find in driftwood on the beaches. Think of the Brunels (father and son) when you see them. Like Paxton who carefully examined the Victoria Regia lily leaf and got the idea for the principle used in the Crystal Palace, Brunel also used imagination combined with an acute observation of natural history.

## BIRDS FOR THE RECORD

by G.N. and G. Hooper, 2411 Alpine Cr. (477-1152)
 Mr . and Mrs. H.D. Walker
(Presumably the same individual seen regularly at the
Hoopers, Alpine Crescent, from Oct. 16 to date)
Horned lark (6) - Martindale Rd. - Jan. 14 -
Lap1 and longspur (1) -
Dave Stirling
Western bluebird (1) - Deep Cove - Jan. 18 -
Bohemian waxwing (1) - Victoria and Central -
Mrs.E.E. Bridgen and Mrs. G. Farquhar
Band-tailed pigeon (15) - Foul Bay Rd. - Jan. 25 -
Allen Poynter
Common redpoll (1, dead) - Beacon Hill Park - Jan. 25 -
Ron Satterfield and Ralph Fryer
(Probably first authenticated local record since 1894)
Hawk ow1 (1) - Clover Point - Jan. 26 -
Ron Satterfield
(A1so seen Jan. 29 at Clover Point by Ralph Fryer, harassing a Great horned owl)
Snow bunting (1) - Gowlland Pt., S.Pender Is. - Feb. 1 Eve Smith
Gray partridge (14) - Pat Bay Airport -
Feb. 2 -
Chipping sparrow (1) - Lochside at Martindale -
Ray Beckett
A.R. and E1eanore Davidson

Note: The Knot is still around; the Common teal has moved to Hastings; the European widgeon and Rough-legged hawk are still at Martindale。

Skipper reports 9 Canada geese flying north in $V$ formation, seen Feb. 3 from Helmcken Road. Spring is here!

## EDITORIAL NOTES

The article originally planned for this page could not be written as the background information for it was too late to meet this month's deadline.

The following notes are therefore presented

1) As the work of our B.C. Nature Council delegate has been much increased, Miss Maureen Collins is now assisting Mr. H.D. Walker.
2) This month's cover was chosen to underline the fact that Major Allan Brooks was not only a bird-illustrator, but drew mammals as well. As many of our members know, skunks do not occur on Vancouver Island.
3) Members who have not seen the January number of the magazine Western Fish and Game will find a copy of it in the Reference Room of the Greater Victoria Public Library. If it is not on the magazine rack, a request at the reference desk will be needed. Then you will have the dubious pleasure of reading about the many moose which have drowned in the lake forming behind the Peace River Dam. Publicity pictures don't show this aspect of the dam, but it is a shocking example of what we, through our taxes, are doing to the wildlife of "Beautiful British Columbia"。Our descendants will be truly shocked when they see that number of this magazine.
4) By now all our members will have seen the first copy of the B.C. Nature Council's Newsletter in its new format and with a new editor. Crisp and clear, on good quality paper and in a form that's easy to mail to all members of the member societies, this new version of the Newsletter is an attractive addition to the conservation literature of the province. Mrs. Soulsby, who edited the original newsletter from its inception early in 1964, built well. Her years of dedicated and enthusiastic work established a sturdy foundation on which to expand the newsletter which will now appear as a quarterly in February, May, August and November. We of the Victoria Naturalist wish the Newsletter well, and hope that the standard of the first number may be maintained. The editor is Mr. E1ton A. Anderson, 3904 Benson Road, Victoria. His phone is 477-1132.

## VARGAS ISLAND

The island lies in the entrance to Clayoquot Sound a short half-hour run in a small boat from Tofino. If the weather is good you can go west across Templar Channel then north along Father Charles Channel to the landing cove. Because a heavy swell was running we went north towards Opitsat on Meares Island and, near the village, swung west across Father Charles Channel to the small cove where the Hesquiat telephone line strikes across the island, a half mile south from the abandoned village of Yarksis.

The B.C. Pilot describes Vargas as low lying and undulating. Compared to the surrounding territory, the maximum elevation of 595 feet is 1 ow and, from a distance, the island has a very flat appearance. The north and south coasts are rockbound and rugged, but the east and west coasts are gently shelving with sand and gravel beaches. The island gives every indication of being wave built. Viewed from the air, the central portion consists of a series of concentric ridges radiating out from the main beach arcs on the east and west coasts. On the ground, the low ridges of sand and gravel are separated by ribbons of sphagnum bog which are typical of those in the Tofino area. From the trail summit near the centre of the island at least four major and numerous minor beach terraces can be distinguished on the western slope. I suspect that an ecological examination of the bogs would indicate a decreasing age from east to west. The presence of water lying behind the current beach ridge would seem to give some weight to this argument.

The exposed beach of Ahous Bay is trimmed with a collar of Sitka spruce that rises from the drift logs in a smooth sweeping curve to a height of 50 or more feet. At the outer edge of the spruce in the more stable drift a tangle of beach pea and sedges choke every available space between the logs and provides a home on the edge of the surf zone for the ubiquitous song sparrow. From the rocks at the south end of the bay a graceful arc of sand leads to a rocky headland which protects the entrance to a bogfringed lagoon. The peat-stained water of the lagoon gives a frothy brown tinge to the surf as the lagoon drains at low tide.

The northern coast facing on to Calmus Passage is relatively protected. The shelving rock and gravel beaches are not unlike those of Muir Creek and Jordan River.

Apart from the turquoise sea anemone, the tide pool life is similar to that found near Victoria.

The spectacular tide pool life of the open coast is found along the south shore of the island between Ahous and Moser Points. Surf breaking over the countless rocks of the La Croix group offshore provides a magnificent background for the riot of colour that greets the eye in the tide pools of this coast. Starfish, urchins, anemones, tube worms, mussels, goose barnacles and various snails crowd every available inch of habitat. Every rock has its forest of brown sea palms and, offshore, bladder wrack and bull kelp provide shelter, sustenance and support to a whole new range of creatures.

One corner of this picture is blank. An animal is missing. Missing but not extinct. With good management and a great deal of luck I hope that before too many years pass I can go on a calm day to a point overlooking the sea and in an offshore kelp bed see a family of sea otters feeding. The habitat is still there and as yet it is undamaged. Without your protection it cannot last much longer. If our offshore kelp beds are damaged by pollution or disturbance we lose all chance of regaining one of our most intelligent and exciting animals, the sea otter.

Murray Matheson

EDITOR'S NOTE: Members who are interested in the West Coast are reminded of articles that appeared in Numbers 5, 7, 8 and 9 of Volume 24 of The Victoria Naturalist. An article on sea-lions and one on sea otters were later reprinted in the Society's booklet A Net of Naturalists. Possibly the best map of the West Coast was published in late 1967. Drawn and produced by the Geographic Division, Surveys and Mapping Branch, Department of Lands, Forests and Water Resources, this map may be obtained from Map Distribution, Room 108, 553 Superior Street. It costs $\$ 1.15$ plus tax.

## PROGRAM FOR MARCH

Executive Meeting
Tuesday March 4
Audubon Wildlife Film
Friday \& Saturday March 7 \& 8-8p.m。
Saturday matinee 2.30 p.m.

General Meeting
Tuesday, March 11

Heritage Court Presents
Friday March 14 , 8 p.m.

Bird Field Trip
Saturday March 22

Bctany Meeting
Thursday March 27

Junior Group

Advance Notice
8.p.m. Home of Mrs. S. Prior 1903 Shotbolt Road
C. P. Lyons presents "This Earth, This Realm, This England"
Newcombe Auditorium, British Columbia Provincial Museum (South Entrance)

Douglas Building Cafeteria 8 p.m. Mr.Clarence Tillenius gives an illustrated talk, "Vanishing Bighorn".

In the Newcombe Auditorium, Wilson Duff speaks on
"Edenshaw, Haida Artist". No admission charge.
Meet at Monterey Parking Lot at 9.30 a.m. or at Witty's Lagoon Parking Lot 10 a.m. For early migrants. Bring lunch. Leader Mr.R.Mackenzie-Grieve 477-2402

Meet at 8 p.m. at Victoria High School. Subject "Exploring the Sand Dunes".
Mrs. J.M. Woollett 384-4836
Meet every Saturday, 1.30 p.m. at Monterey Parking Lot, Douglas at Hillside for field trip. Leader Mr.Freeman King 479-2966

Annual meeting of B.C. Nature Council at Comox, March 26 \& 27 (Saturday and Sunday)


The Nature Council will hold its business meeting on the Saturday, and will continue it on the Sunday if necessary. A Sunday field trip has been arranged for the families and friends of delegates. Our delegate is Mr. H.D. Walker, 3907 Ascot Drive, 477-2851.

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