The Young Naturalist

YOUNG NATURALISTS CLUB F. O. N.

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The Park That Kids Operate

About seven miles from the City of Victoria, B.C. there is a Park consisting of 215 acres, mostly virgin fir forest. It is a Class "C" Park of the Province of British Columbia under the control of a local Parks Board. The Park was named *Thomas S. Francis Park* after the man who gave the land to the Province in 1960.

Operation of the Park is a volunteer project of the Victoria Natural History Society through its Junior Branch, that has a membership of over eighty children.

The Juniors are divided into two groups, one from nine and a half to eleven years of age, the other from eleven and a half upwards. Each group meets on alternate Saturdays at 1.30 P.M. and stays in the field till 4.00 P.M.

Juniors operate and maintain the Nature House that is built in the Park. They make and arrange all displays, which are changed according to the . They conduct tours around the trails in the Park during the weekend and on holidays. They also give instruction to Brownies, Cubs, and many other children who wish to learn about the Park's flora and fauna.

Over the years, the children have cut and maintained more than five miles of hiking trails within the Park. Along the trails are signs which point out interesting features; these are changed according to season. No horseback riding, hunting, shooting, picnicking or destruction of any plant is allowed. The trails take people from the marsh lands through the slopes up into the high rocky knolls and through the climax forest areas. As they wind around rocks, large trees, old stumps and beside ponds, something new and different is presented at each turn.

The making of the trails is hard work for children but they do it with a

See PARK — Page 2

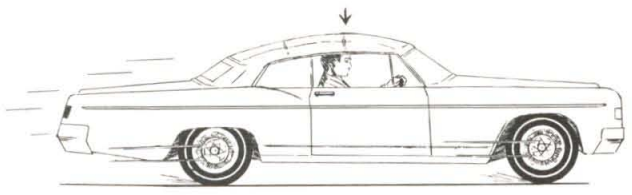
The Junior Branch of the Victoria Natural History Society operate and maintain the Nature House in Thomas S. Francis Park, Victoria, B.C.
Photograph by Ralph Fryer

Teaser-of-the-Month

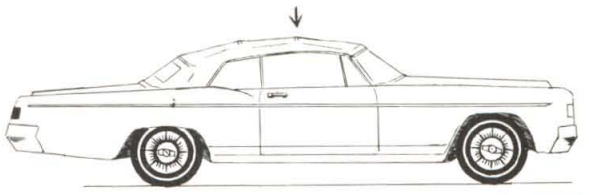
Gordon Penrose

A young naturalist was taking an automobile trip with his parents. As a convertible passed by he noticed that its top had "ballooned up" as shown in the sketch. A short time later he observed the same car when it had stopped at a gasoline station. Its top had now flattened as shown in the second sketch, but all windows were closed on both occasions.

Explain what had happened to the top of the convertible. Try to demonstrate the same thing in some other way.



Convertible in Motion



Convertible at Rest

Don Foxall

PARK — from Page 1

will and enjoy every minute. They use double-bitted axes, mattocks and shovels, and saws for the larger logs that lie across the trail. As they work, the Park becomes "their" Park to be loved and appreciated.

A forest fire in the Park destroyed about eight acres. The Juniors replanted this area with Garry Oak, dogwoods, some pine and Douglas Fir. They made a map of the area and spotted where each tree was planted. If a seedling dies, it is replaced.

A small laboratory is attached to the Nature House. Here the children have a chance to use the microscopes and delve into some of the mysteries of living things.

Park work is not the only activity of Victoria's Junior members. They may visit the sea shore, a stream or lake, perhaps a mountain or some marsh land. This gives them a wider knowledge of nature and shows them how one section fits into another; in other words, they are learning and living "ecology". Parents provide transportation for the field trips. A small lecture room 16′ x 24′ is being built where in very bad weather nature movies or slides may be shown.

Each year there is a camp of a week's duration attended by about twenty-five boys and girls. This is a tent camp; mothers do the cooking and the children study the area around them, its soil, plants including mosses and lichens, birds, insects and mammals.

When in the field or at camp, the Juniors are divided into sections with an older or more experienced boy or girl in charge. Members of the leader section are taken out on an all-day cook-out once a month. This gives them a chance to learn a little more to pass on to others. It is also a lot of fun. Technical terms are avoided in talks to the children and field trips are not confined to a single area of interest such as botany. The approach is kept general so that each child has a chance to pursue his own interest and yet keep the overall picture in mind.

Some of those who started out in the original group twelve years ago are now university graduates. Some work for the Provincial Park Branch as park naturalists, some for the Federal Forestry Department, some have stayed on at university to do research work. Several are now teaching in B.C. universities.

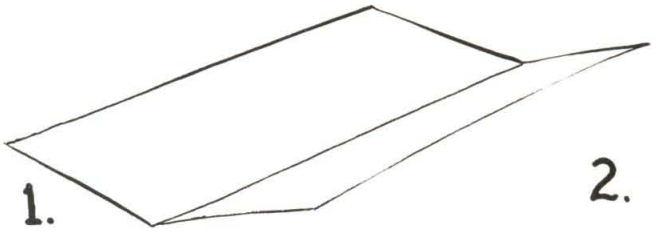
Recently another fifty acres was added to the Park. This will give the Junior Branch an added interest, for it will have to be surveyed as to its flora and fauna, mapped as to where trails will be built. Perhaps some plant will be added to the Park's small herbarium containing 300 species, dried, mounted and classified.

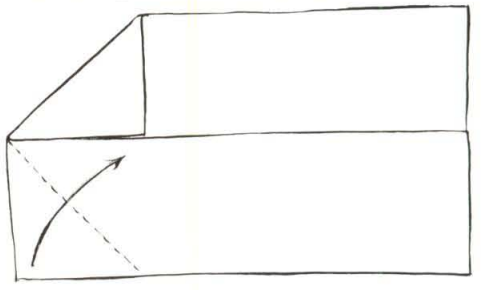
"Skipper" Freeman King

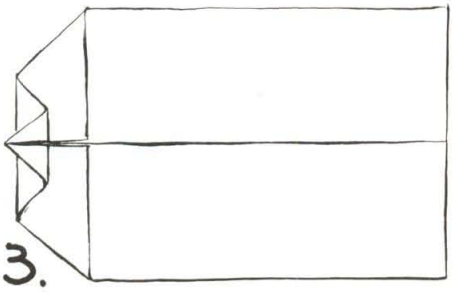
Residents of British Columbia would not call Ogidaki a mountain, as it is only 2,183 feet above sea level. However, it is the highest point in Ontario. Ogidaki is situated about 36 miles northeast of Sault Ste. Marie. "Ogidaki" is Ojibway for "high ground".

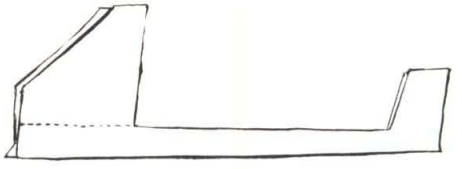
Boys and girls rest on a hunt for lichens on Mt. Douglas, B.C.

AMATEUR AERONAUTICS

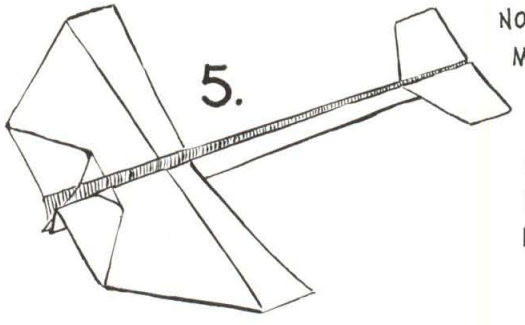








COMPARE YOUR PAPER MODEL WITH A REAL AIR-PLANE. WHAT SURFACE IS MISSING ON YOURS? WHAT PART OF THE MODEL DOES THE WORK OF THE MISSING SURFACE?



NOW TEST-FLY YOUR MODEL. IF YOU ARE LUCKY IT MAY GLIDE SMOOTHLY DOWN AND MAKE A GENTLE LANDING! MORE THAN LIKELY IT WILL ------

----DO A CRASH DIVE , GO INTO A SPIN , OR DO THE "DIPS"

ALL THESE FAULTS CAN BE CORRECTED BY BENDING PARTS OF THE WINGS OR TAIL OR BY ADDING WEIGHT IN DIFFERENT PLACES (USE A PAPER CLIP ⊂⊃). CONTINUE ADJUSTING AND TESTING UNTIL YOU ACHIEVE A SMOOTH, GENTLE GLIDE----

NOW WATCH A REAL PLANE, NOTICING HOW THE PILOT'S CONTROLS "BEND" THE WINGS AND TAIL TO CONTROL THE FLIGHT OF THE AIRCRAFT. CAN YOU MAKE YOUR MODEL DO A LOOP?

O.G.B.

WOODLORE
FOR THE NATURALIST

— John Macfie —

An Increasingly Rare Bear

Large adult polar bear entering sea at Cape Henrietta Maria, Ontario (from photo by John Macfie)

The Province of Ontario shares responsibility for preserving from extinction the Polar Bear, now listed among the world's endangered species of wildlife. The giant white king of the arctic regions is thought to have evolved from a race of brown bears, some of which were trapped to the north of a continental ice sheet during the Ice Age. Pale-coloured individuals had better luck creeping up on seals, the only abundant food; they lived longer and had more off-spring than darker specimens, until finally, after thousands of generations, a white bear emerged. The reluctant stranger became, in the end, master of his new environment.

But this outstanding success story could end in failure in your lifetime. Polar Bears have dwindled in numbers since the days when the ships of ice-bound polar expeditions were visited by a hundred or more curious bears in the course of a winter. In certain sections of its circumpolar range, where it has been subjected to heavy exploitation by whaling and sealing expeditions, the animal has all but disappeared. There may be as few as 10,000 left in the whole world.

Concern about the plight of the Polar Bear has resulted in investigations that show a substantial population of the animals in southern Hudson Bay and James Bay. This is where Ontario enters the picture. Off the beaten track of the whalers and sealers, and south of the territory of the bear-hunting Eskimo (the native Coast Crees are a land people who do not habitually hunt the sea bear), this band seems to have escaped the ravages of excessive hunting. When Hudson Bay is frozen, most of the bears are out on the sea ice hunting seals, but many of the group — one hundred or more as a rule — spend the ice-free season of late summer and fall loafing on Ontario beaches. In autumn the pregnant females go inland to give birth to cubs in December, remaining in the Ontario forest until March.

Until now, an accident of geography has sheltered this segment of the world's Polar Bear population. Hopefully, recent conservation measures being put into effect around the northern world will not be too late to save this fearless fellow who has the mistaken notion that all living things must make way for him. This once valid attitude has become his chief weakness in an age of aircraft, power toboggans and increasing human activity in his native habitat.

Female polar bear and 8-month old cub take a stroll on a James Bay beach. (from photo by John Macfie)

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Club News

A number of boys and girls have written to *Club News* recently, telling us about Young Naturalist clubs they belong to. David Rosenbaum of Toronto writes:

"On Friday, October 20, 1967, Room 11 of Norseman Public School had their first Young Naturalist's Club meeting of the season, with the President presiding. All members were present. First on our programme was an interesting talk on "Sedimentary Rocks" which was given by Lori McCarville. Next, we had speeches for an election we were going to have for "Social Conveners". (You may think that it's a bit strange but our Y.N.C. is part student council and part Y.N.C.) Next we had the election. The votes were taken and the ballots counted. For the girls it was Megan Macdonald and for the boys it was Robert Ross. The rest of the Executive are: President, David Rosenbaum; Vice-president, Lorna Schoenroth; Secretary, Robert Rohn; Treasurer, Valerie Carr."

Stephen Moses of St. Marys' Ontario, tells us that the Executive of the club he belongs to are Maurice McLellen, President; Eddie Hendriks, Vice-president; Stephen Moses, Secretary; and Wollie Detweiler and Marty Hockstetler, Artists. They recently did an experiment to see whether salt and water would freeze, and made some observations of mice. Brenda Barker of West Toronto raised tadpoles and watched them grow legs, and Christine Ball made friends with some squirrels. Finally, from Aylmer, Ontario, Arthur Stock writes that he is planning to organize a club in his school. We wish him success, and hope that many more clubs will be formed in the coming months.

BARBARA WILKINS

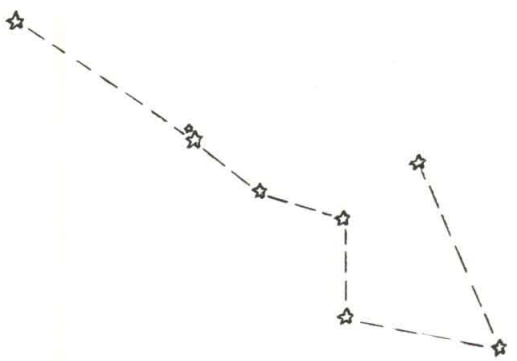
Many boys and girls have organized a natural science club in their school or classroom. If you have such a club, you are invited to share your experiences with others by reporting your activities in this column. We would be pleased to have pictures of your outings and projects. Be sure to describe your activities fully, giving the names of the leaders and assistants. Write to Mrs. Barbara Wilkins, Editor of Club News, 213 Rosedale Heights Drive, Toronto 7, Ontario.

The Motion of the Stars

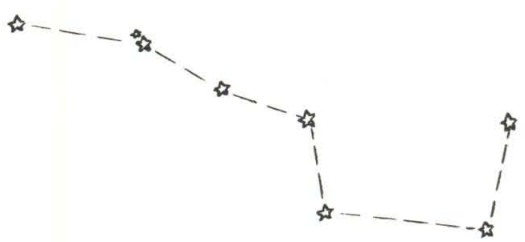
Last month we suggested an experiment that would allow readers to observe the motion of a planet (Saturn) with respect to the stars. We said then that although the stars are moving they are so far away that we would have to wait hundreds or thousands of years before we would *notice* any change in the appearance of the sky. However, astronomers with their telescopes can detect changes in the positions of the stars in the sky after only a few years. From their observations it is possible to predict the appearance of the sky at any time in the past and at any time in the future.

A familiar group of stars which is quite close to us and moving relatively fast is the Big Dipper. There are seven stars in the Big Dipper and five of these are moving together through space and away from the other two. The result of this motion is that the familiar figure of the Big Dipper which we can see in the sky tonight did not exist in the same form a few thousand years ago and it will continue to alter its shape in the future. In the picture we have drawn the Big Dipper as it appears now, as it appeared 100,000 years ago, and as it will appear 100,000 years from now.

DOUGLAS P. HUBE



100,000 years ago



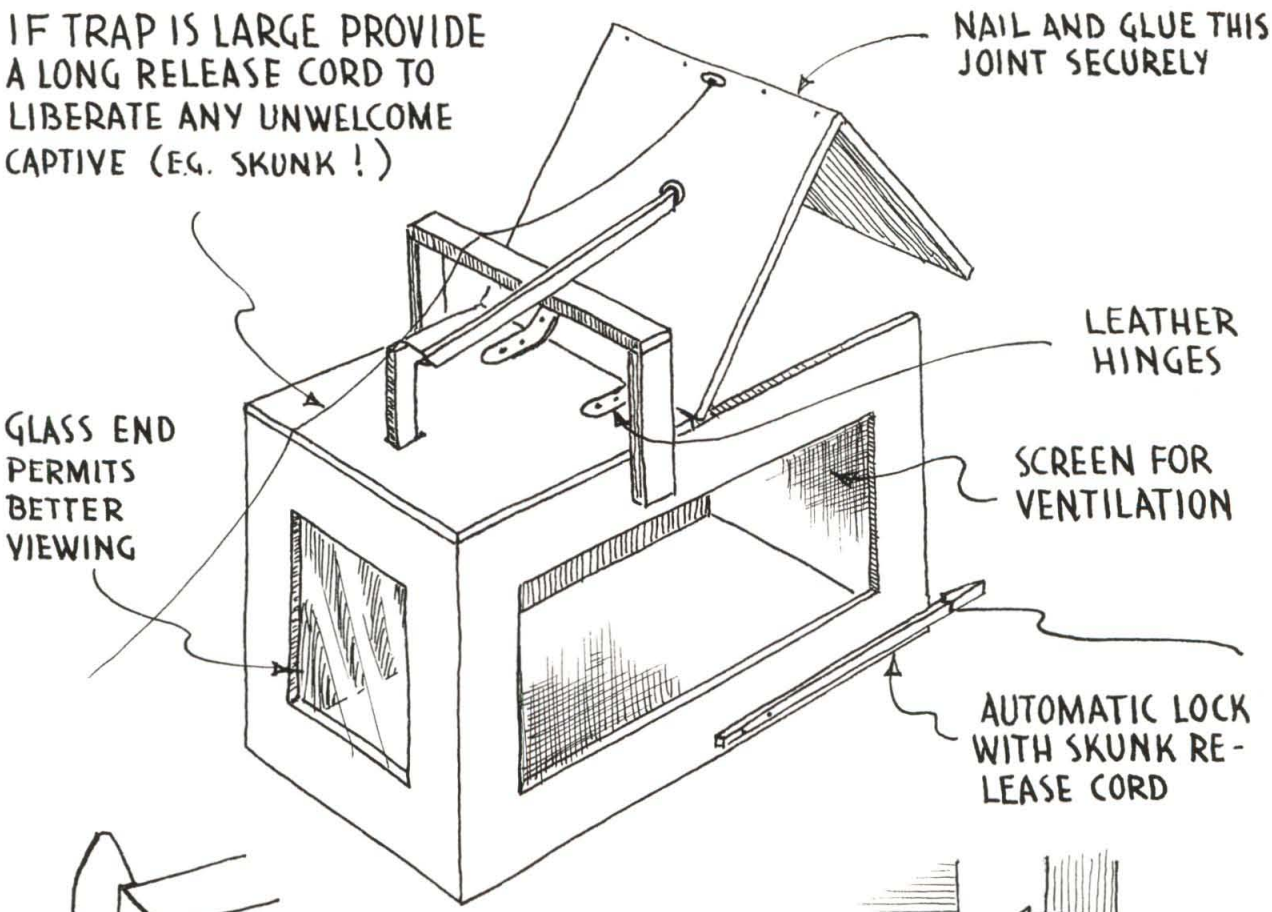
At present

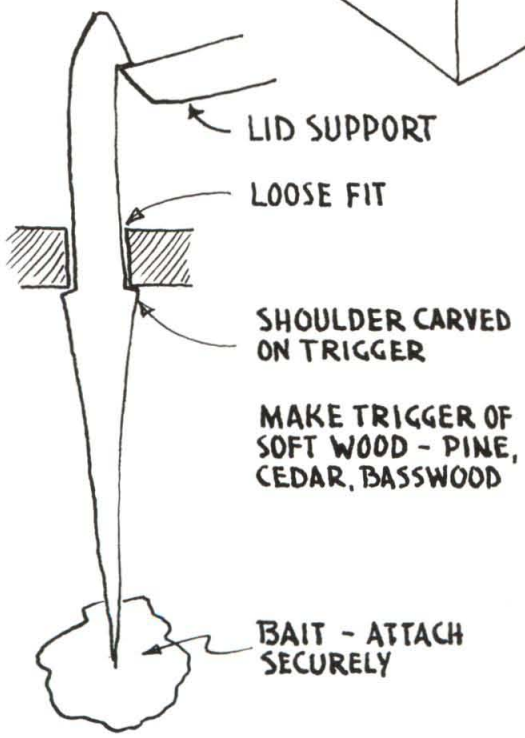
100,000 years from now

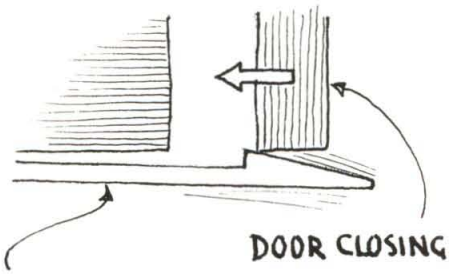
The naked eye appearance of the Big Dipper in the past, present and future. The second star from the end of the dipper's handle is a double-star.

A LIVE TRAP

FOR THE HUMANE CAPTURE OF SMALL WILD ANIMALS







CUT THE LOCK CATCH FROM SPRINGY WOOD AND FASTEN IT ON WITH 2 SMALL NAILS SEVERAL INCHES IN FROM THE END

CAUTION

1. DO NOT HANDLE CAPTURED ANIMALS
2. ALWAYS RELEASE ANIMALS AFTER A SHORT PERIOD OF OBSERVATION

O.G.R.