C. N. F. REPORT

The membership of the Canadian Nature Federation has elected six new National Directors to serve for the period of 1976-1978. We note with pleasure the election of two B. C. Directors, namely, Dr. lan McTaggart Cowan of Vancouver and Mr. W. Winston Mair of Victoria. Mr. Mair has also been nominated as a Regional Vice-President (B. C. and Yukon) and thus becomes a member of the executive committee. A report from the Treasurer indicates that the stringent cost cutting has greatly improved the financial position of the Federation. It is anticipated that the accumulated deficit will drop to zero by the end of 1976. The donations received from members (in excess of \$90,000) assisted in large measure to eliminate the debt. The Board of Directors have accepted an invitation to hold the 1977 Annual Meeting and Canadian Conference for Nature in Regina, Saskatchewan.

WANTED: Articles - Observations - Notes on items of interest in the field of Natural History. Type and double space all submissions and mail to the editor before the deadline for the December issue.

THE BOOK SHELF

"Wilderness Survival", 152 pages published jointly by the Forest Service, Department of Forestry and the Outdoor Recreation Branch, Department of Recreation and Travel Industry. A pocket book aimed at campers, hikers, skiers, hunters and others who go into wilderness areas. The book has many good illustrations and the articles are written in a clear concise manner. The first printing of 50,000 has been distributed and a second 50,000 has been ordered. Although the book is aimed at beginning outdoor enthusiasts, there are many useful ideas for the experienced out-doorsman. The booklet is available free of charge from any office of the British Columbia Forest Service or from the Outdoor Recreation Branch.

HIKING TRAILS I — VICTORIA AND VICINITY

By the Outdoor Club of Victoria, 46 pages. Price \$1.50 and 9c postage. This is a completely revised and expanded booklet of the original title "Hiking Trails." The booklet is informative and very popular; this being its sixth printing since 1972. It covers clearly defined trails suitable for short walks to day hikes.

HIKING TRAILS III - CENTRAL AND NORTHERN **VANCOUVER ISLAND**

By The Outdoor Club of Victoria, 72 pages. Price \$2.25 and 12c postage. A revised guide to the hiking trails in the area from Strathcona Park to Cape Scott. The booklet contains many informative maps, some sketches and interesting documentation of the Trails. Maps of trails in mountainous regions include contour lines at 500 feet. Hiking Trails I and III can be obtained from the Outdoor Club of Victoria Trails Information Society, P.O. Box 1875, Victoria, B. C. V8W 2Y3.

EXPLORING BRITISH COLUMBIA WATERWAYS — SOUTHERN INTERIOR

By Dave Stewart; Saltair Publishing Limited, Sidney, 160 pages. Price \$4.95. An excellent mile by mile guide for anyone interested in sailing, canoeing, or cruising the lakes and rivers of the southern Interior. The book includes many interesting pictures representative of the Southern Interior. This is a welcome addition to the guide books published by Saltair.

PRINCE GEORGE BACKROADS

By Ken and Kathy Bernsohn; Soltair Publishing Limited, Sidney, 144 pages. Price \$4.95. The book is organized into four sections for quick and easy reference. The mileages

appear to be fairly accurate. Interspersed among the pages of the text are trip log sheets, which are handy for noting mileage and recording items of special interest.

WILD HARVEST

By Alyson Hart Knop; John Wiley and Sons Canada Ltd., Rexdale, Ontario, 192 pages. Price \$8.95. An interesting book about edible wild plants of North America. The writer guides the reader through all stages from recognition, to collecting to recipes and preparations. The line drawings are an aid to recognition and the section on plants to stay away from may be helpful to amateurs who are not too sure of themselves.

The book is divided into sections such as Natures salads, potherbs, fruits, nuts, etc. and one or more recipes accompany each plant discussed. Many of the plants are found only in the east, although quite a number are found all across Canada.

An interesting and practical addition to the library of nature lovers and natural food fans. Anyone who ventures into the outdoors and might need emergency rations would find this book very helpful.



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Malcolm Martin

Contribution 50.00

DEADLINE FOR NEXT NEWSLETTER IS NOVEMBER 8, 1976

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ECOLOGICAL RESERVES CULLEUTION GOVERNMENT OF BRITISH COLUMBIA VICTORIA, B.C.

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P.O. Box 33797, Station D, Vancouver, B.C. V6J 4N8 Newsletter Correspondence to the Editor: Frank Paul, 1804 - 30th Avenue, Vernon, B.C. VIT 2A5

OUR CANADIAN WILDERNESS HERITAGE: THE SPATSIZI PLATEAU WILDERNESS PROVINCIAL PARK by Rosemaly J. Fox

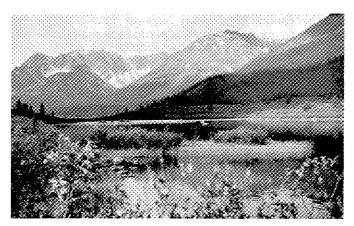
In spite of growing support in recent years for Thoreau's view that "in wildness is the preservation of the world," there is a widespread feeling throughout this continent that the system of parks, wildlife sanctuaries and ecological reserves does not complete the need for preservation of some of the natural conditions that prevailed prior to European settlement. As Durward Allen, one of North America's foremost wildlife biologists, wrote in the autumn 1975 issue of Wildlife Review, the magazine of B.C.'s Department of Recreation and Conservation, "let us recognize that there should be a kind of 'pure' wilderness where we do not tamper with anything,

Pure wilderness was what Lois Crisler was thinking of when she wrote in her book Arctic Wild, "wilderness without animals is mere scenery." While, therefore, wilderness in the minds of most is nowadays generally considered to mean a large undeveloped tract of land where enthusiasts can enjoy primitive recreation, pure wilderness may be defined as an undeveloped area in its natural state, large enough to embrace a naturally sustainable ecological system containing its historic complement of large mammals. Wilderness as thus defined is fast disappearing in North America and can only be found in northern Canada

The establishment of the Spatsizi Plateau Wilderness Park, containing within it the 82,000-acre Gladys Lake Ecological Reserve - a combined total of one and three-quarter million acres - provides an opportunity to preserve for future generations some of the true wilderness that once was Canada. When the new park was announced on November 27, 1975, it was hailed as a wilderness-wildlife preserve and likened to the great game parks of East Africa. The Order in Council which subsequently approved and ordered the Park on December 3 recognized its special values by stating that: The area will be maintained as a wilderness landscape in which natural communities are preserved intact and the progressions of the natural systems may proceed without alteration.

The term "the Spatsizi" generally speaking refers to the area between the Stikine and Klappan rivers in northern B.C., from their respective sources to their confluence. It comprises the Spatsizi Plateau and Eaglenest Range of mountains. Most of it, including the valleys, is over 4000 feet in elevation and represents the spruce-willow-birch subalpine zone and the alpine tundra zone. The new park's boundaries approximate but do not coincide with this geographical area (see map) as they were drawn thus to exclude areas of potential mineral or timber harvesting

The fact that, unlike so many other parks and wild areas in this province, there are no conflicts with either logging or mining interests in the Spatsizi Park enhances the opportunity to manage it as a true wilderness where the



TROUT LAKE - SPATSIZI

T. A. WALKER

"natural communities are preserved intact and the progressions of the natural systems may proceed without alteration." While the wilderness of fragile northern environments, with their short growing season and severe climates, cannot support quite the abundance of wildlife as are to be found in East Africa, and the Spatsizi may not therefore be another Serengeti, nevertheless it does support a relative overall abundance of wildlife living in a relatively unimpaired ecosystem. The word relative is important because in recent years the wildlife of the Spatsizi have been subject to increasing hunting pressures and disturbance. This is due to a number of factors: the Stewart-Cassiar highway enables people to drive to within 30 miles of the Spatsizi and the Dease Lake extension of the B.C. Railway, in the absence of tracks, provides access up the valley of the Little Klappan river (now the western boundary of the park); whereas at one time people had to walk or ride into the area, now aircraft can land on a number of lakes; and the guiding business which operates out of Cold Fish Lake has expanded its activities. resulting last Fall in what is reported to be the largest kill of game ever to be taken from the Spatsizi. It is not known to what extent the railway along the Little Klappan may intersect wildlife ranges and disrupt migration patterns.

The species sought by hunters include Stone's sheep and mountain goat, Osborn caribou, moose, grizzly bear and wolf. The Stone's sheep in the Gladys Lake drainage of the Eaglenest Range were intensively studied during the 1960's by Dr. Valerius Geist, now of the Department of Environmental Design at the University of Calgary, and the ecology and behaviour of this population is well documented in his book, Mountain Sheep (University of Chicago Press, 1973). A survey of the wildlife of this area (now the ecological reserve) in 1975, carried out under the auspices of the Parks Branch, concluded that the apparent substantial reduction in the sheep population and the absence of sightings of any ram over 4½ years old were due to the heavy hunting pressures of recent years. The

survey revealed that the goat population in this area also appears to be reduced from what it was when Dr. Geist conducted his studies. Although no studies have ever been made of the grizzly bear population in what is now the Park, the Fish and Wildlife Branch is concerned that this species may also have been overhunted.

Hunting of Osborn caribou has apparently been fairly light on the whole, due to difficulty of access to caribou-frequented areas during the hunting season. However, reported increasing hunting pressure on the Osborn caribou is a matter for concern as its ecology and behaviour have never been studied and no one knows what the requirements are for the protection of this subspecies of caribou - the largest of all caribou and restricted in its range to northern B.C. and the southern Yukon. Studies of other caribou populations, however, have indicated that these animals tend to lead a particularly precarious existence, and as a result environmental factors may preclude reproductive success from compensating for hunting pressures.

The creation of the Park is the culmination of efforts to preserve the Spatsizi which were started 20 years ago by Tommy Walker, then registered guide in the area. The Sierra Club, which has played an important role in wilderness preservation in North America since its inception in 1892, has been following the more recent efforts to preserve the Spatsizi, and has welcomed the formation of the Park, which finally provides an administrative framework for managing this wilderness.

In the summer of 1975 my husband and I, both Sierra Club members, spent three weeks in the south-east part of the Spatsizi and gained some familiarity with a small section of what is now the Park. On behalf of the Club in Vancouver we have been studying the implications of human recreational use for the long-term preservation of the area as a true wilderness. We have concluded that, while the intent of the Order in Council establishing the Park is clear, as already indicated, it is extremely important that measures are adopted from the beginning to provide the "exceptional protection and management to ensure that the values associated with the wildlife are retained and not permitted to degenerated in quality," which the Order realizes "such unique wildlife areas require."

What does implementation of this policy require? First of all, the critical importance of the natural ecosystem as a basic feature of pure wilderness must be recognized. It follows from this that the ecological system of the Spatsizi must be carefully studied and understood in order to determine how much use the area can sustain so that the "progression of the natural systems may proceed without alteration." Currently very little is known about the ecosystem of the Spatsizi, not even the population numbers of the different species. Nor is the total number killed annually by hunters known.

While the damage caused by overhunting may be evident, the damage that can be caused by other types of outdoor recreationists (hikers, horseback riders etc.) is perhaps less readily recognized. But these so-called nonconsumptive users of the wilderness may also have a detrimental effect, particularly when in large groups.

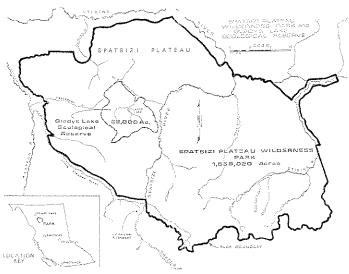
These considerations have led the Sierra Club to the following conclusions:

- ★ ecological studies should be carried out that will provide a sound basis for managing the wildlife in accord with the objective of maintaining the Park as a wilderness-wildlife preserve;
- * hunting should be of a low intensity and systematically regulated in order to avoid unnatural disturbance of the ecosystem, and should be suspended until the necessary studies have been completed;
- * all other forms of recreation hiking, canoeing,

horseback riding, etc. — should also be strictly regulated in order to avoid impairment of the ecosystem and of the wilderness character of the Park, and that this step should be taken *before overuse occurs*, possibly through institution of a permit system. Permits are now required in some of the U.S. parks, such as Mount McKinley in Alaska, and there is much to be said for utilizing the same procedure in the Spatsizi, with the number of permits limited in accord with a pre-determined carrying capacity.

If forthright action is taken now to achieve the laudable objectives of our government in establishing the Spatsizi Plateau Wilderness Park, the Canadian people will have forever a priceless wilderness in which the sheep, the caribou, the wolf and the grizzly live in a natural relationship to one another and to other elements of the environment. Can we afford to miss this opportunity to preserve this heritage?

Rosemary J. Fox



ROYAL COMMISSION ON FOREST RESOURCES

Our article on the Royal Commission on Forest Resources in the March, 1976 Newsletter brought a comment from a spokesman from Rayonier that we had misinterpreted their remarks about thinning operations in immature timber stands in parks. Rayonier were not suggesting that they wished to work on this type of logging operation, since presently it is a marginal operation at best, but they have been impressed by the improved look of timberland which they have thinned by this process. The wide spacing of the trees gives an impression of a mature forest, many years before this would occur naturally. They felt that some parks which had been created from second growth land could be thinned to improve the visual appearance and sale of fibres would about cover the cost. The big advantage of thinning comes later when the mature trees are harvested perhaps on a somewhat shorter rotation period. However, this would not occur in the case of parks where trees are not normally harvested.

A disadvantage of this proposal would be the virtual elimination of all dead trees and few opportunities for cavity nesting birds. Nevertheless, it is a suggestion which could have merit in some cases.

HUMANE TRAPPING GIVEN TOP PRIORITY

Trapping in British Columbia will be more humane than anywhere in Canada under the 1976-1977 trapping regulations, according to the Minister of Recreation and Travel Industry, Grace McCarthy. The regulations have abolished leg-hold traps with teeth or projections on their jaws. British Columbia becomes the first province to require all

registered trap-line holders to check their holding or nonkilling traps at least every seventy-two hours. All private land trappers will be required to check their trap-sets at least every twenty-four hours. Coyotes and wolves have been designated as fur bearers in British Columbia because of their increasing population over the past several years.

A COMMUNITY COLLEGE AT WORK

The Institute of Environmental Studies, Douglas College offers to youth groups and naturalists the use of the study centres and nature trails in Surrey. These trails give access to some of the major natural habitats of the Lower Fraser Valley. Application forms for booking visits and obtaining printed guides to the nature trails and other facilities can be obtained from:

The Institute of Environmental Studies Douglas College, Box 2503 New Westminster, B.C. V3L 5B2 Telephone 588-4411, Local 238

FEDERATION ACTIVE ON MANY FRONTS

1. Berger Commission Hearings

A brief to the hearings on the MacKenzie Valley Pipeline Inquiry was very ably prepared and presented by Dr. R. Stace-Smith, Chairman of the F.B.C.N. Conservation Committee. The recommendation of the Federation is that alternatives be sought to the building of the Pipeline. It is now obvious that we do not have as much oil and gas as we were led to believe — that what we have is going to be more difficult and costly to recover — that we are continuing to squander what we have with little thought for the future. The commitment to conservation of energy at the federal level is minimal and at the provincial level British Columbia is probably typical. Virtually no effort goes into energy conservation, with the result that B.C. Hydro estimates that power demands in the province will increase at the rate of 9.2 percent per year for the next eleven years. It is the opinion of the Federation that as much effort should be directed towards ways and means of conserving energy as is directed towards finding and exploiting new sources

2. A Brief to the B. C. Energy Commission

The F.B.C.N. through the Thompson-Okanagan Regional Council submitted a brief to the B.C. Energy Commission regarding the Proposed Tariff Revisions by West Kootenay Power and Light Company. The Federation believes that the true costs of energy production should be reflected in the West Kootenay Proposed Tariff Revisions. We also urge that definite Economic incentives be introduced to promote the conservation of energy. These would involve the following changes in the proposed rate schedules:

- 1). Progressive rates within each schedule causing heavy users to pay increasingly higher rates.
- 2). The elimination of minimum monthly rates.
- 3). The establishment of an Energy Conservation Fund through a tax on energy revenues. The fund would research, develop and promote energy conservation measures while ensuring that future energy developments were carried forward with the least impact on the environment.

B.C. is endowed with abundant natural resources and energy potential; but they are still finite in nature, with the costs of exploitation increasing daily. We must be aware of the true costs involved and begin immediately to adopt conservation measures. Only by directing our efforts toward attaining a level of stabilized energy utilization can we be assured that the population of this Province will have adequate energy resources in the long run.

3. Revelstoke Project

The Federation has produced a position paper on the Revelstoke Project Environmental Impact — Preview. The Federation is opposed to Construction of the Revelstoke Project within the time shown on the Construction Schedule. It should be noted that serious mistakes made in past planning, such as the Columbia Project, have cost the Province many millions of dollars. Decisions made in haste to meet high growth rates are also likely to result in further costly errors. Our concern is that Revelstoke is only one step in a continuing process of valley flooding which B. C. Hydro Chairman, Mr. Bonner, has stated will continue, despite environmental losses, in an attempt to meet the high growth rate forecast by B. C. Hydro.

4. Report On Resolutions

The Federation has documented the status of the resolutions passed at the A.G.M. in April 1976. Prompt and concerned replies have been received from many government officials who have jurisdiction over matters raised by the resolutions. Members of the federation interested in the resolutions should contact the Federation.

WIND STORMS DAMAGE FOREST

Wind storms last November left 9,200 acres of uprooted and damaged trees with the "blowdowns" ranging in size from a few acres to 2,000 acres each. Centered east of Prince George in the Bowron Park and Purden Lake areas, the damaged stands present two vital problems. One is an increased fire hazard, and the other is the possible infestation of spruce bark beetles. The Forest Service together with logging companies who are working in the areas, will remove as many trees as possible this year in an effort to avoid the hazards.



WOOD DUCK NEST BOX

At the A.G.M. in Kamloops a number of people expressed having problems with starlings entering wood duck boxes. Neil Dawe reports the installation of a new type of box at the Reifel Migratory Bird Sanctuary. Greater success was achieved at keeping out the starlings, with more Wood Ducks utilizing the nests and he reports the nesting of two barn owls in the new boxes. Information about the new type of nest boxes can be found in a paper "A Starling - Deterrent Wood Duck Nest Box" which can be found in the Journal of Wildlife Management, vol. 35, number four, October 1971. Neil reports that the information is also available in a new book, "Ducks, Geese and Swans of North America," by F. C. Bellrose, Interested individuals wanting further information should contact: Neil K. Dawe; Canadian Wildlife Service; R.R. #1, Quolicum, B.C. VOR 2TO.