

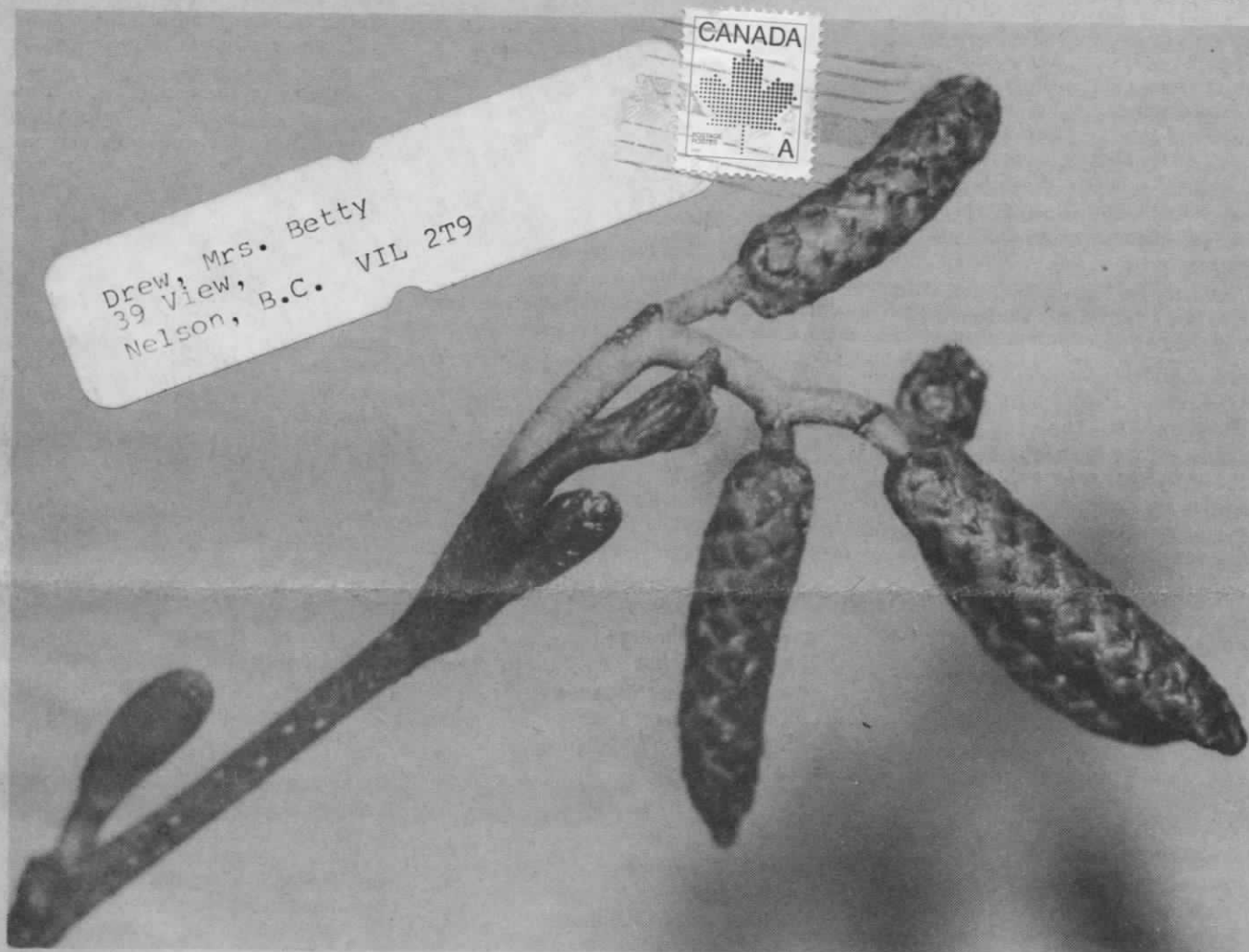


# B.C. Naturalist

SPRING, 1982



VOL. 20 No. 1



Red Alder  
photo Al Grass

## A.G.M. Notice

## Wild Life Atlas

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The Federation of British Columbia Naturalists  
1200 Hornby Street, Vancouver, B.C. V6Z 2E2

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## Over the editor's desk

Dear Sir:

Through the medium of your publication I wish to publicly thank, on behalf of the Canadian Wildlife Service, one of your member Clubs, the Comox Strathcona Natural History Society, for its assistance with a study of migratory bird use of the Comox Harbour - Baynes Sound area of the east coast of Vancouver Island. In fact, without the help of the C.S.N.H.S., the study may not have been undertaken — at least not on the scale which the Society's help made possible. A brief description of the study follows.

The study area included the contiguous area of Comox Harbour (Courtenay River estuary) and Baynes Sound south to Mapleguard Point at Deep Bay, a distance of about 20 miles (30 Km). The area is rich in bird life, particularly migratory waterbirds, and also is attractive to developers of various kinds. The problem was that although we, in the Habitat Assessment Section at Canadian Wildlife Service knew the area be generally good habitat for birds, we were lacking systematically collected bird use data for much of the area. Thus, we were at a decided disadvantage whenever we were requested to comment on the potential impacts on migratory bird habitat of development proposals in the area. A study to obtain the appropriate data clearly was needed, but with present governmental constraints on both manpower and money, several years would be required to complete it. Enter the C.S.N.H.S.!

When informed of our predicament, the C.S.N.H.S. readily offered their assistance. They were concerned about the preservation of important local habitats and their membership could provide an abundant supply of skilled naturalists to conduct the bird counts. All they needed was some direction — and perhaps a bit of financial help.

To make a long story short, an agreement between Canadian Wildlife Service and the C.S.N.H.S. was reached. The C.S.N.H.S. would provide the bird counters and Canadian Wildlife Service would provide study direction, a special set of record forms and a gasoline mileage allowance at the approved government rate. The study area was divided into several sub-areas and a team of 2 or 3 naturalists provided to count the birds in each sub-area. Counts were conducted weekly, usually on Saturdays, from October 1980 to October 1981. An

Continued on page 7

# President's message

## "AN OPEN SEWER BY THE DOOR"

The planning committee for the Fraser River Estuary Study has invited the public to participate in workshops to review a draft management program for the Fraser River estuary. The workbook that was distributed at the public meetings was entitled "living river by the door" which is the vision for the future presented in section one of the workbook. I contend that a more honest vision for the future might be the one that I have used as the title of this message.

Despite the tone of optimism in the presentation that was made by members of the study team, I am not at all optimistic that the draft management plan that they are proposing is capable of achieving the vision that they outline for the future. This vision appears to have been written by some poetic dreamer who is completely out of touch with the realities of the situation. Is the unwashed public expected to gain the impression that the Federal and Provincial Environment Ministries intend to devise and implement a management program whereby "the river is truly a living river, full of life, activity and vitality, . . . where critical habitats have been permanently protected and others have been enhanced and established . . ."? This hope is quickly dispelled if one critically examines the proposed management program.

Section 2 of the workbook presents an excellent summary of the issues and concerns from citizens, user groups and agencies. The summary statement on management expresses the views of most of our members, namely "most citizens recognize the complexity of decision-making in the estuary. They would like to see these complexities simplified. Many of them would like to see the plan administered through one control body or agency. They want a decision-making process that is accountable and effective." I ask you, what is so unreasonable about this management statement? Is it too much to expect a decision-making process that is both accountable and effective: Apparently so. The request has been made on a number of occasions to the planning committee and it has been consistently rejected.

To what are the planning committee recommending in their draft management plan? Precisely what you would expect them to recommend if they wished to pay lip service to preservation and enhancement of the Fraser River estuary but in fact



photo Jude Grass

were not committed to such a policy. The so-called "linked management plan" that they are proposing is essentially a continuation of the management plan that has been in effect over the past several years and which has resulted in "an open sewer by the door" that we have today. If the objective is to maintain the status quo, to give industry the privilege of dumping their unwanted waste into the river, to give federal agencies permission to build training walls and to further destroy marshland by building airports and superports, to give municipalities the privilege of dumping their untreated sewage into the river, then the planning committee could not have come up with a better management plan. What disappoints me is that the planning committee, chaired by D.R. Heln of the B.C. Ministry of Environment, did not level with the citizens of the province and advise us that they failed to agree on a suitable management plan and have therefore decided to settle for continuing with the status quo.

One must ask the question, is it possible to devise a management plan that would restore the environmental integrity of the Fraser? I maintain that it is possible, but not if the task is assigned to a planning committee that is not committed to the objective. Further, even if the individual members of the planning committee were committed to the objectives, they would have to have the support of the politicians to who they are responsible. Have we seen any evidence that environmental issues are a high priority in Victoria or Ottawa? To be effective, a management plan would require the backing of the provincial and federal government. Until there is a dedication at the political level we are unlikely to achieve any significant improvement.

Dick Stace-Smith

## Up and coming

- |        |  |        |   |
|--------|--|--------|---|
| Mar. 1 | F.B.C.N. Directors Meeting, 6:15 p.m., ORC Van.  | 29     | Sierra Club Meeting, 8 p.m., Robson Square, Vancouver. Admission \$2.00. Topic: The Future of our Environment — Where is it Headed? with Michael McGonigle.                     |
| 8      | F.B.C.N. Conservation Com. Meeting, 7:30 p.m., ORC Van.  | Apr. 3 | F.B.C.N. Lower Mainland Regional Meeting. Time and place T.B.A. Contact Jude Grass.   |
| 26-27  | Second Annual Environmental Education Conference, Sheraton-Villa Inn, Burnaby; Contact Melissa Hadley, 685-8541.   | 5      | F.B.C.N. Directors Meeting, 6:15 p.m., ORC Van.   |
| 26-31  | NORTH AMERICAN WILDLIFE AND NATURAL RESOURCES CONFERENCE, Portland Hilton Hotel, Portland, Oregon. Sponsored by the Wildlife Management Institute. The Theme of the meeting will be 'Population Pressures and Resource Management Needs'. Details from: W.M.I., 1000 Vermont Ave., N.W., 709 Wire Bldg., Washington, D.C. 20005. | 12     | F.B.C.N. Conservation Com. Meeting, 7:30 p.m., ORC.   |
| 28     | B.C. Waterfowl Society A.G.M., 1 p.m., Reifel Refuge, Delta.   | 20-21  | Environmental Monitoring — A symposium sponsored by The Alberta Society of Professional Biologists; Edmonton. Contact Don Thompson, Secretary, P.O. Box 566, Edmonton, T5J 2K8. |
|        |  | 26     | Sierra Club Meeting, 8 p.m., Robson Square, Van.  |
|        |  | May 3  | F.B.C.N. Directors Meeting, 6:15 p.m., ORC Van.   |
|        |  | 10     | F.B.C.N. Conservation Com. Meeting, 7:30 p.m., ORC, Van.  |

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# North east coal symposium

Prince George, B.C.  
Wednesday, October 14, 1981  
COMMENTS

The North East Coal Development is a fact. It is not something for discussion.

For over five years studies (at least 20) have been undertaken by the various government agencies, mainly Ministry of Environment, by B.C. Hydro and B.C. Railway and by the Coal Companies involved. These reports are now part of the background history of the development of a large part of the North East section of British Columbia.

## HISTORY

Mining exploration of the area approximately 90 km. south of Chetwynd on the eastern side of the Rocky Mountains, has been going on for a number of years. In late 1980 (early '81?) the Province of B.C. appointed Mr. Ron Basford to the position of Director of the North East Coal Development. He is to co-ordinate, communicate and act as a liaison between the Provincial Cabinet, the agencies and companies of the Tumbler Ridge area and the public. He has no "power", but does have a staff of 13 people to help carry out his duties. He has a sub-office in either Chetwynd or Dawson Creek. Information dissemination to the public is part of his duties, thus, the symposium. Both the Prince George City Council and Chamber of Commerce had been unsuccessful in getting together a wide-ranging number of Coal Development participants to speak to them or even to get concrete information on what was actually happening.

The attached magazine article (B.C. Business, August 1981) gives a comprehensive summary of the events to the present day.

In order to develop the mines, negotiations have been going on and agreements reached between B.C. Hydro, B.C. Rail, C.N. Rail, Ministry of Highways and the Coal Companies to develop the infrastructure in order that shipments of coal can meet the export deadlines to Japan starting in 1983. Background information on these negotiations and negotiators is rather hazy. When they started, who authorized the capital expenditures to construct roads, bridges, railways, tunnels, etc., and indeed, plan, develop, and build the complete new town of Tumbler Ridge, has also never been made clear. But it did happen and not only is the townsite being cleared, bridges and roads are being built, and a commissioner, Pat Walsh, has been appointed to be the administrative head of Tumbler Ridge until an election can be held some two to four

years hence. Crown property is being developed; as yet there are no inhabitants. Plans are for the first residents of Tumbler Ridge to take up residence in late 1982. A population of up to 10,000 is projected for 1986. The town will not be a company town, but its boundaries will include the two mine sites (1 north, 1 south) for a broader tax base.

## WORKSHOPS

Five were held covering the following areas: training, economic, social, environmental, and native. The last three were the least interesting to the general public, as most people attended the training and economic workshops.

Summaries of the day's proceedings and workshops (approximately 8 hours) are available in the form of audio tapes (\$25 each) or video cassettes (\$300). They are in the raw, unedited form. No summary or copies of presentations are available. Many of the morning presentations included slides of the North East area and mainly statistics.

1. The **training** workshop discussed the lack of skilled help available. Inadequate training facilities, trainers, updated information, etc., were a major concern as was the problem of acquiring a "ticket" or getting a union card, once trained. Special efforts are supposed to be made to hire natives and women.

2. The **economic** workshop was by far the most popular. Many people, including some from Prince George businesses, appeared very interested in the opportunities being created in the development of this area. A large number of contracts have been let and many more are coming on stream.

The road south from Chetwynd is being improved and further development planned. Tumbler Ridge to Chetwynd is approximately 90 km. and from Chetwynd to Prince George, another 320 km. An airport is being built with flying time from Prince George only 20 minutes away. Plans have not included the much demanded road access from Prince George via Highway 16 East via Dome Creek, north to Tumbler Ridge, less than 200 km. in total.

The Prince George "Citizen" is publishing a series of articles on the North East Coal Development, which is quite good (and accurate).

## SUMMARY

The Symposium was the first public hearing of the progress in the development of part of the North East area of B.C. The two coal companies presently involved are actually only a small part of that development. Building the in-

frastructure to accommodate this development and (in the beginning) a new town, is the major undertaking. Plans are for more coal mines, some forestry (logging, sawmills) and further explorations for gas and oil. The recreation potential is tremendous for the whole area and of course when further access is available, tourism will become a major financial contributor to the Province's coffers.

The environmental and social impacts have been studied and promises made to protect wildlife, and create a desirable social setting for the inhabitants of Tumbler Ridge.

Patricia Schneider

## MY COMMENTS — P. Schneider

The prospect is exciting, but I'm fairly sceptical. The social and specifically, the environmental aspects are supposed to be "looked after"; however, the fact is this area is being developed without (so far) public input and with very little information being released until after the fact. Interested parties must start now to find out what is going on in that area.

Fish and Wildlife (Ministry of Environment) presently have seven field people in place. Protecting those two resources (fish and wildlife) is their major concern; however, Fred Harper, Fish and Wildlife, Fort St. John, and an environmental panel member summarized our feelings when he said it is not much the two coal mines now being developed as the infrastructure, town and the people that will be the major concern. People having easy access to ungulates and their winter ranges, no snowmobilers, riverboat access to rivers, lakes being fished out, and general habitat destruction, associated with those less concerned about the environment in general, will cause problems. Unless the situation is looked at and discussions made to protect as much as possible the total environment including scenic, historical, animal, and the land, we will have another situation whereby Government will act late — after the fact — to protect a reasonable area of B.C. in a reasonable fashion.

Continued from page 2

Prince Rupert Naturalists  
T.B.A.

PEACE  
Timberline Trail and Nature Club  
Don Johnson  
(Director Representing  
Individual Members)

Chris Siddle

For full list of committees and club addresses see WINTER, 1981 edition.

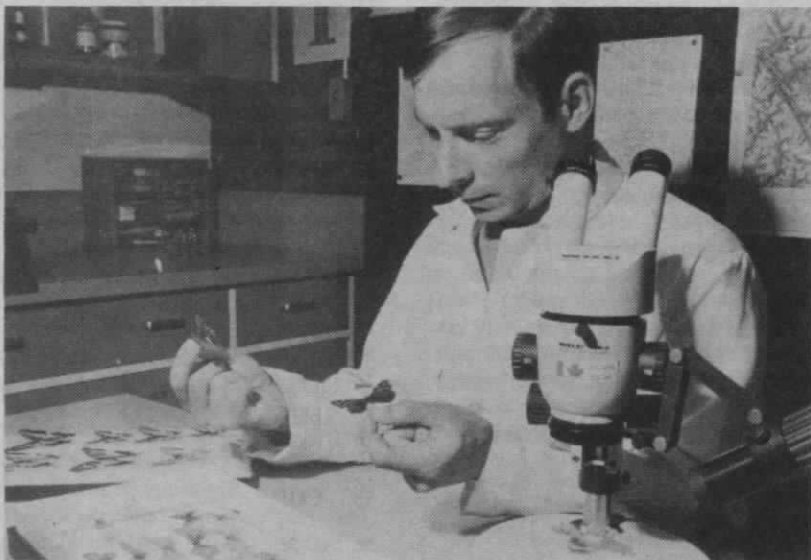


photo Parks Canada John. G. Woods

## Butterflies are beautiful

David Threatful of Revelstoke, B.C. is a lucky man: he is one of those rare individuals who has developed a childhood hobby into a lifelong interest.

At 36, Threatful is acknowledged as a self-taught expert in the study of butterflies. For more than 25 years, he has observed and collected these insects. His personal collection of carefully mounted and labelled specimens currently represents 170 species — about 23% of the North American total. One hundred and eleven of B.C.'s 160 butterfly species are meticulously preserved in the Threatful collection.

Since June, 1980, Threatful has donated considerable time to the intensive study of the butterflies of Mount Revelstoke and Glacier National Parks. As a volunteer researcher, he is helping

the parks obtain data on butterflies and is producing an educational reference collection.

"About 67 species of butterflies live in this area of the Columbia Mountains," explains Threatful. "To date I have documented 57 species within Mount Revelstoke and Glacier."

Threatful's research in the parks has already been of considerable public value. His information documents the diversity of the butterfly resource in Mount Revelstoke and Glacier. This data will be included in park educational programmes. The reference collection of specimens has been arranged and mounted to last for decades.

This high degree of professionalism in a person without formal training at first seems surprising. Ask Threatful the

name of a butterfly and his reply will be immediate and in Latin. Words like **Papilio** and **Euphydryas** flow as easily as their English equivalents: swallowtail and checkerspot.

Threatful credits his Revelstoke grade three teacher, Eva Burn, with sparking his serious interest in nature. "Miss Burn encouraged us to collect and identify insects, birds, plants — anything natural. She awarded stars for good work," recalls Threatful.

From this early start, he focussed his interests and began to read and learn all he could about butterflies. In his early 20's, Threatful made a vital connection. From a magazine he learned the address of Dr. Ferris at the University of Wyoming. Ferris responded to the enthusiastic young lepidopterist's letters and encouraged him in his studies. Over the years, Threatful's correspondents increased. Dr. Bird at the University of Calgary, Dr. Jon Sheppard of Nelson, B.C. and the Biosystematic Research Institute in Ottawa all communicated with the independent student of butterflies.

Threatful's volunteer research should be concluded by the end of 1981. By then he hopes to have surveyed the remote Grizzly Creek area of Glacier National Park and to have finished the reference collection for the parks. Next winter, a scientific paper on park butterflies will complete his work.

How could a group of insects inspire a study spanning a quarter-century? Threatful admits that butterflies have provided him with motivation to travel and to enjoy the outdoors. But his basic explanation is straightforward, to Threatful's mind and eye, "butterflies are beautiful."

**John G. Woods**  
Chief Park Naturalist  
Mount Revelstoke and  
Glacier National Parks

## New Forestry hand book

### Guiding the Public Involvement Process

Victoria, B.C. — It is not a manual for activists. It is not a device to divert public attention from vital issues. It is not a cure-all for squabbles over the forest resource.

But it is a handbook for making the public involvement process operate effectively.

That's how Dr. Bruce Fraser describes his Public Involvement Handbook, now being distributed by the Ministry of Forests.

The new handbook is designed primarily as a guide for Forest Service field personnel who are applying the

policy, but it is also of value to public interest groups taking an active part in the process.

Public involvement has become part of the normal Ministry of Forests procedure for allocating timber rights, establishing forest management practices and dealing with public controversy over any plans, proposals or programs.

Copies of the handbook are available from Queen's Printer Publications, Victoria, at \$10 per copy.

**Ministry of Forests**  
Information Services Branch

### Photo's Wanted

We are looking for cover shots and other captioned photo's for the **B.C. Naturalist**.

Starting with the Fall 1982 edition we would like seasonal type shots (e.g. cover - autumn theme). Submissions must be black and white prints, no smaller 5 x 7 in. and have good contrast. Please label with subject matter or title, name, address, phone number. Use PENCIL only - do not press or use label. All photo's will be returned.

### Articles Wanted

Articles and short features on natural history subjects are needed. Length up to 500 words. Photo or drawing can be included.

**B.C. Naturalist Spring 1982 — Page 5**



Continued from page 2  
 attempt was made to conduct the counts in the various subareas simultaneously to reduce the chances of counting the same birds more than once. Numbers of birds seen were recorded in field note books and later transferred to the special forms provided by Canadian Wildlife Service. The forms were then forwarded to Canadian Wildlife Service at the end of each month. Coordination of the project on behalf of the C.S.N.H.S. was very capably handled by Phil Capes, the Chairman of the Society's Conservation Committee. I was the Canadian Wildlife Service contact.

I believe that the above account is an excellent example of cooperation between a naturalists' club and a government agency. When the data are analyzed, there will exist a much better base from which to advise regarding future development proposals in the area. The C.S.N.H.S. can be proud of the part that they played in the gathering of those data and in the fact that they have played an active role in the shaping of the destiny of their own local area.

There must be a tremendous untapped potential of naturalists out there willing and able to perform a similar service for other areas of good migratory bird habitat currently under the threat of development. I invite any energetic naturalist group willing to undertake such a cooperative study to contact me.

Donald C. Trethewey  
 Habitat Assessment Biologist  
 Canadian Wildlife Service,  
 P.O. Box 340  
 Delta, B.C.  
 V4K 3Y3

## Conservation in China

Received from T.L. Danlock, Vernon; a letter too long for publication. The essential statement of the letter may be in this excerpt "Having read Dr. L.K. Wade's article about conservation in China in the Winter 1981 issue of the **B.C. Naturalist**. I hope it is permissible to give your readers another dimension on this topic. . . . The various leaders in Peking have for many years been trying to convince the world that their totalitarian and overly centralized system is making great leaps forward. One of their favorite methods for propagandizing is the guided tour . . ." To quote Mr. Danlock again "Mr. H. E. Richardson, former British ambassador in Tibet has asked whether recent visitors to Tibet "can still see great herds of gazelle and burrhel and the less numerous kyanges and ovis ammon,

also bears, wolves and other mammals? . . . flocks of wild geese and duck . . . and the stately parties of black-necked cranes? . . . The killing of animals goes against the Buddhist code of morality . . . hunting is not regarded as a sport in Tibet, but a crime . . .

There is little hope that any eatable bird or mammal has escaped the attention of the Chinese army." Danluck quotes Lobsang Dhargyal, who visited Tibet in November 1979: "It is not only the Tibetan people who have and are continuing to suffer under the Chinese regime, but all the 'semchen' (mind-possessing beings)" . . .

It is hoped that the information here is sufficient to answer Dr. Wade's questions about the mysterious absence of birds, reptiles, amphibians and mammals. The conspicuous absence is actually no mystery . . . Totalitarian, centralized government, under whatever guise or label, is the most destructive force on the planet.

## Submissions requested

The Public Advisory Board for the Provincial Habitat Conservation Fund wants to hear from public groups and individuals who have proposals for habitat acquisition or enhancement, Environment Minister Stephen Rogers said recently.

"A dozen excellent projects for the restoration or improvement of fish and wildlife habitat have already been approved, and we are in the process of acquiring several key habitat areas through the Fund.

"These first activities have been initiated from within the Ministry, however, and the Advisory Board has recommended that proposals for future projects be solicited from the public as well. Ministry staff will review any proposals received and areport on their technical aspects to the Board, which will then consider them from the broader view of public benefit and recommend acceptable projects to me," the Minister said.

Rogers added that a brief paper is available explaining what material should be included in a proposal to ensure that it contains the basic information needed for initial consideration by the Board. Copies can be obtained from:

**Dr. Ian McTaggart-Cowan**  
 Chairman, Public Advisory Board  
 Habitat Conservation Fund  
 Ministry of Environment  
 Parliament Buildings, Victoria V8V 1X5



**Jumping Spiders:** Small or medium-sized spiders found on plants, logs and rocky areas; they attract attention by their quick jerky movements, and conspicuous eyes. "Jumpers" are keen hunters, pursuing prey and springing out when close enough for capture. They move forward, sideways and backwards with equal agility. Silk is used for cacoons, egg cases and drag-lines, but not webs.

Photo and text: Al Grass

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B.C. Naturalist Spring 1982 — Page 7



# Wild life atlases

## Progress report

Your response was terrific. Thank you! During the next few weeks we will be sending interested participants details of work to be done. We still, however, need several more regional co-ordinators for the southeast, northeast and north-central parts of the province. If anyone is interested in co-ordinating the transfer of naturalists' records from these areas, please let me know.

An atlas steering committee has now been formed and presently consists of eight members. These are:

Wayne Campbell (Provincial Museum)  
Neil Dawe (Canadian Wildlife Service)  
Yorke Edwards (Provincial Museum)  
Alton Harestad (Simon Fraser University)  
Gary Kaiser (Canadian Wildlife Service)  
Michael McNall (Provincial Museum)  
Ian McTaggart-Cowan (Victoria)  
David Stirling (Parks Branch)

These people will be responsible for directing data collection and transfer, designing atlas format and procuring support for the project. In addition, support and advice is being received from other agencies, namely FISH AND WILDLIFE BRANCH (Ray Halliday, Don Eastman and Bill Munro), FOREST SERVICE (Rick Ellis), TERRESTRIAL STUDIES BRANCH (Bruce Pendergast), DUCKS UNLIMITED CANADA (Tom Stirling), FACULTY OF FORESTRY, U.B.C. (Fred Bunnell) and FEDERATION OF B.C. NATURALISTS.

### Atlas Proposal Comments

Several months ago we prepared a proposal for the atlas project and mailed copies to many people throughout North America for comment. Most of the respondents were excited about the concept and encouraged us to continue with it. Some comments received were: "It looks like you are going to come up with a pretty useful publication." (Ralph Ritcey, FISH AND WILDLIFE BRANCH, KAMLOOPS); "... it is very worthwhile and a long overdue project." (Andy Stewart, TERRESTRIAL STUDIES BRANCH); "... it is an exciting and worthwhile project..." (Brian Nyberg, MINISTRY OF FORESTS); "... the atlas will have many important practical uses and

will be an important step in managing and conserving B.C.'s wildlife. Perhaps more importantly, I believe they will contribute significantly towards informing and educating the public about B.C.'s vertebrates". (Dr. Fred Bunnell, FACULTY OF FORESTRY, U.B.C.); "... I certainly see the value of such a document to B.C. Hydro." (Dr. R. M. Bradley, TERRESTRIAL ECOLOGY SUPERVISOR); "... (the atlases) certainly will be useful to our agency for management planning, public information and research." (Ray Halliday, CHIEF OF WILDLIFE MANAGEMENT, FISH AND WILDLIFE BRANCH); "... in a publication of this nature, i.e. a landmark publication..." (Dr. M.D.F. Udvardy, CALIFORNIA STATE SANTA BAR-



BARA UNIVERSITY); "... There is no question that the whole idea is first rate, and will be of very great value to people like ourselves." (Dr. H. Dean Fisher, DEPT. OF ZOOLOGY, U.B.C.); and "... there was genuine enthusiasm from the Federation Directors for the proposal." (Dr. V.C. Brink and B. Cannings, FEDERATION OF B.C. NATURALISTS).

It appears then there is general support and encouragement for the project and needless-to-say, we are now committed to see the project to completion.

### Work Completed

The transfer of data to index cards and nest record cards is more or less organized systematically into the general categories of museum specimens, literature, historical diaries/notebooks and naturalist records (i.e. field observations) and miscellaneous sources such as breeding bird counts, banding records and compulsory inspection records for large game mammals.

A handful of volunteers have recently transferred nearly 50,000 records of specimens of birds, mammals, reptiles and amphibians from catalogues of the American Museum of Natural History, Cowan Vertebrate Museum, B.C. Provincial Museum, Museum of Vertebrate

Zoology (Berkley) and Royal Ontario Museum. Presently, all reptile and amphibian specimens from thirty plus American collections have been transferred. Some work remains to be done on additional bird and mammal information. Bernice Smith, Win Speechly, Mary Wainwright, B. Van Der Raay, Jeff Reeve, and committee members have mainly been responsible for this work.

All papers listed in the herpetology bibliography (1200 references) and the first volume of the ornithology bibliography (2100 references) have been read and the appropriate material transferred. This tremendous task was completed with help from Tracy Hooper, Alistair Bell, Douglas Bertram, Mary Wainwright, Jeff Reeve, Keith Taylor, and Mary Rannie.

We will have another 3-4000 papers extract information from before the literature segment of the atlas is complete. These will be listed in the upcoming mammal bibliography and second volume of the ornithology bibliography.

All published and unpublished winter bird counts have now been transferred members of the ARROWSMITH NATURALISTS CLUB (Ernie and Margey Bates, Eileen Bell, Noel Muriel Craig, Jerrie Fyall, May Moss Frank and Alice Mould, Art and E. Woller, Nell Whellans, S. Wilson, Zroback, Bill Parker and Roger Smith) and COMOX-STRATHCOCKE NATURAL HISTORY SOCIETY (Beedle and Maureen Mills). This significant effort resulted in nearly 500 cards. Neil Dawe co-ordinated the transfer.



Other naturalists are presently working with information in diaries and notebooks and their assistance is acknowledged as work is completed. Presently, diaries of Werner and Hesse, Glen Ryder, Yorke Edwards, Charles Guiguet, Ian McTaggart-Cowan, Derek Beacham and Keith Teloskey are being read and transferred.

Naturalist records have been transferred regularly during the past several years. Very detailed records have been transferred from Christopher Sidde (Fort St. Adrian Dorst (Tofino), Nairn F. (Namu), Vic and Peggy G. systems co-ordinators for birders, Neil Dawe (Qualicum

Douglas Kragh (Vancouver) and Rick Howie (Kamloops).

If other naturalists have noteworthy records (with details) of birds, mammals, reptiles and amphibians in British Columbia, and they are willing to transfer their observations to index cards, please let me know. We will send you cards and instructions for transferring the information. We especially need records of mammals, reptiles and amphibians, even for COMMON SPECIES.

#### Noteworthy Records

We hope to summarize noteworthy records of vertebrates in this space with each progress report. We would appreciate receiving details of such records whenever they appear. They can be sent to Wayne Campbell, B.C. Provincial Museum, Victoria, B.C. V8V 1X4.

#### Mammals

A bat and a whale have recently been added to the list of mammals known to occur in Canada (hence B.C.) A group of researchers from Carleton University discovered SPOTTED BATS (*Euderma maculatum*) near Oliver during the summer of 1981. It is surprising this large bat has been overlooked in the past because it does have an unmistakable call. Perhaps we weren't familiar with the strange sound it emits. Sabina Leader discovered a small whale washed ashore on Pachena Bay on 25 September 1981. The specimen was salvaged (BCPM #10400) and was later identified as a DWARF SPERM WHALE (*Kogia simus*).

STRIPED SKUNKS have extended their range to the north and west recently. Dave Crack, Conservation Officer, photographed a road-killed animal (BCPM Photo No. 657) 20 miles west of Terrace on 10 May 1981 and Dave Hatler reported a trapped animal from the Bulkley Valley on 12 November 1981. This specimen was salvaged. Unfortunately this skunk has now been introduced to Vancouver Island. A road-killed animal was picked up by Keith Taylor near Sooke on 18 August 1980 and another road-killed animal was seen by Wayne Campbell, north of Duncan, in October 1981. It appears that the species is probably well established on the island.

#### Birds

Two species have been added to the B.C. list of birds, one of which is a Canadian record. A SCRUB JAY was photographed (BCPM Photo No. 747) in a private yard in Langley on 8 November 1981 by Wayne Campbell. The bird was only seen on this day. Later searches by Campbell in December

and January failed to locate the species. This new Canadian record isn't really a great surprise since Scrub Jays are slowly moving northward in Washington, two have recently been reported in Christmas counts near Seattle. The other new B.C. bird was a MAGNIFICENT FRIGATEBIRD. We have had at least half a dozen reports since 1972 from fishermen of "large black birds with long-pointed wings and deeply forked tails" following their boats. This species follows the warm California current northward, and are only reported when it comes close to our coast. Finally a bird (an immature) perched on the mast of a boat owned by G. Deagle who documented its occurrence in the province with a superb photo (BCPM Photo No. 656) on 25 August 1981. The bird was off Langara Island (Q.C.I.) Three days earlier John Disney reported an immature, probably the same bird, at Egeria Bay on the Queen Charlottes.

The gale-force winds in November caused a lot of excitement for Victoria birders by bringing pelagic species close to our shores. On 15 November 1981 Wayne Campbell observed SHORT-TAILED SHEARWATERS, FORK-TAILED and LEACH'S STORM-PETRELS, and BLACK-LEGGED KITTIWAKES near Trial Island off Victoria and a SABINE'S GULL was photographed (BCPM No. 748) in Victoria's inner harbour.



A BROWN PELICAN was fed by hand four days in early December 1981 on the boat of Glen and Don Edwards, near Bamfield!

Several noteworthy photo-records from the Okanagan were passed along by Rob Cannings. A GREAT GREY OWL, extremely rare in the north Okanagan, was photographed by Tom Collins (BCPM No. 741) near Okanagan Mission on 4 November 1981. Two new Okanagan records included photographs of an ANNA'S HUMMINGBIRD on 1 November 1981 near Kelowna (BCPM No. 742) by Tom Collins and Frank Paul and a PURPLE FINCH (BCPM NO. 743) at Lovington Stock Farm on 29 December 1981 by Tom Collins and Rob Cannings.

At least 25 reports of CATTLE EGRETS were received from many places throughout the province. Two significant records were documented by photograph, one from Kispiox River

(BCPM No. 726) on 20 October 1981 by B. Johnston and another at Revelstoke (BCPM No. 730) on 20 November 1981 by John G. Woods.

A NORTHERN MOCKINGBIRD is spending the winter near Malaspina College (Nanaimo). Bill Merilees passed along a superb photograph (BCPM No. 746) taken by R. Ikona on 27 December 1981.



Dave Hatler, while driving through Clinton on 13 December 1981 estimated over 1550 GRAY-CROWNED ROSY FINCHES feeding along the highway. One more significant record was a WHITE-THROATED SPARROW seen by Gary Davidson at Nakusp on 4 October 1981.

#### Reptiles and Amphibians

Two new herps have recently been added to the list of 37 species of reptiles and amphibians known to occur in the province. A NIGHTSNAKE (*Hypsiglena torquata*), a typically northern California subspecies, was discovered near a rattlesnake den near Kaleeden by Howard Lacey on 29 September 1980. The animal was trapped but later died in captivity. Apparently the specimen will be sent to us for preservation. The other addition has been overlooked by herpetologists although its occurrence in the province was published. Apparently a reptile called REEVE'S TURTLE (*Chenemys reevesi*) was introduced by Chinese immigrants in the early 1900's to a lake near Port Alberni. Later specimens were collected and preserved by herpetologists. Although introduced it has been added to the official list, along with other introduced species like BULLFROG, GREEN FROG, and SNAPPING TURTLE.

Stan Orchard and R. Waterfield recently discovered small numbers of SHARPTAIL SNAKES (*Contia tenuis*) near Metchosin on Vancouver Island on 7 April 1980. Superb photographs (BCPM No. 648) have been acquired, documenting the second occurrence in British Columbia.

Please send noteworthy records of Vertebrates, especially Mammals, Reptiles and Amphibians, to me in December, March, June and September.

Wayne Campbell  
Vertebrate Zoology Division  
B.C. Provincial Museum  
Victoria, B.C. V8V 1X4

# Death Road

It was a clever stakeout, The raven sat perched on a snowbank, overlooking the Trans-Canada Highway. As the diesel truck roared into view, the raven began to fidget.

Down on the highway, 200 pine siskins milled about in the westbound lane. Like barnyard chicks, they pecked away at bits of gravel, oblivious to the approaching semi. At the last second, the flock rose. Seven flew too late. After bouncing off the grille, they lay with their wings fluttering in the air blast following the truck.

The raven glided down to the asphalt. In an instant, it had scooped up the lifeless siskins and stuffed all seven into its gullet, and was back on the snowbank waiting. Pickings were good that day along the death road.

This scene is repeated over and over each winter. In another incident, along the Trans-Canada Highway in Glacier National Park, park naturalist John Woods watched as 12 siskins in a flock of 200 were killed by a vehicle.

No one knows exactly how many small birds are clobbered along our roads each winter. However, on a typical day it's not uncommon to see up to ten percent of any given flock decimated each time a vehicle bears down.

And the slaughter isn't limited to winter, nor to birds. Since 1963, park staff have kept records of wildlife road kills in Mount Revelstoke and Glacier National Parks. The list is growing and shows that any species wandering near the highway can be victimized: 36 porcupines, 25 black

bears, 13 moose, seven coyotes, six mountain goats, six beaver, five pine martens, four grizzly bears, four mule deer, and other assorted wildlife species ranging from lynx to marmots.

The list is impressive but in no way complete. In fact, the real death toll is undoubtedly much higher.

"A lot of animals are killed, but before dying manage to crawl off the highway into the forest where they remain hidden," says chief park warden John Turnbull.

Hundreds more are immediately carted off the highways by a host of scavengers such as ravens, crows, jays and coyotes — themselves often killed while foraging on road kills.

The list also doesn't include small wildlife — rodents, reptiles, amphibians, small birds — creatures small enough to escape detection by park staff on patrol.

The problem is most severe in other national parks traversed by the Trans Canada Highway. Banff National Park, for example, lost 245 large mammals between 1977 and 1979. This staggering carnage has prompted park officials there to plan roadside fences and wildlife underpasses — measures proven to be effective in similar situations elsewhere.

Wildlife populations of large mammals such as elk, deer and sheep have shunned the Columbia Mountains, which explains why casualty figures here are much lower. The narrow steep valleys and deep snow typical of the Columbias are unattractive to grazing wildlife.

Wildlife is attracted to the highway for a number of reasons. The few grazing mammals found here feed along the

grassy right-of-way. Mountain goats wander down to the edge to lick the salt from highway operations. Birds collect on the roadside and swallow bits of gravel — the sand grains act as millstones in the bird's gizzard. But others, especially porcupines, ground squirrels, and beavers are simply crossing the highway and their leisurely pace exposes them to the greatest danger.

Each winter, thousands of birds will die on the Trans-Canada, not just in national parks, but wherever highways venture into bird habitat — which is just about everywhere.

The impact on small birds is more than cold chrome against bird flesh: some small winter bird populations may be declining. An American ornithologist estimates that up to 60 million birds are killed by cars in the continental United States each year.

As American environmental writer Janet Hopson rightly points out, wildlife aren't the only losers in highway collisions. "A 1975 U.S. Department of Transportation report found that 118 people were killed that year in road accidents involving deer," writes Hopson.

Except in particularly severe problem areas, there doesn't appear to be any general solution to the problem. Sadly, road kills bear out the inevitable conclusion that wildlife and highways don't mix.

James W. Mulchinock  
From: National and Provincial Parks  
Association Newsletter May 1981  
(Reprinted with permission)

## Rare plants discovered

### COOLEY'S BUTTERCUP *Ranunculus cooleyae*

Cooley's Buttercup occurs sporadically in rocky, alpine sites on the coastal mountains of British Columbia and Alaska, and has been reported from two peaks in Washington. A small population exists on a rocky ledge of Mount Seymour's Second Pump Peak (Mount Seymour Provincial Park), at an elevation of about 4500 feet, and a few plants also grow on the side of the main peak of Seymour. I have not heard of this plant being seen previously in the Vancouver area, but there could very well be more populations as it is inconspicuous when not in flower.

Flowers *R. Cooleyae* usually possess ten, narrow, yellow petals, and each flowerstalk has a single narrow bract on it. Unlike most buttercups this stalk does

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not branch, but bears only one blossom. The leaves are also distinctive, being very deeply lobed, and growing close to the ground.

The Snow Buttercup *R. Escholtzii* is a similar species common in high mountains, but it occurs in alpine meadows, and its petals are wider and fewer in number.

### SNOW BRAMBLE *Rubus nivalis*

The Snow Bramble is a trailing plant very similar in appearance to the Trailing Blackberry *R. ursinus*. It differs, however, from that species in the leaves, which are thick, glossy, and blunt, and the berries, which are reddish. These brambles are generally considered to occur in subalpine or montane habitats but information about them is not readily available due to their rarity.

*R. nivalis* grows in one spot close to the Alouette Mountain Trail (Golden Ears Provincial Park), at less than 2,000 feet elevation, in association with *R. ursinus*. Because of this proximity the differences between the two species is readily apparent. Despite the seemingly low elevation the Snow Bramble looks to be thriving, but is probably a less competitive plant than Trailing Blackberry, and there is a distinct possibility of its being crowded out by its more familiar cousin. As it is probably bird-disseminated there may be other, more remote areas in Golden Ears Provincial Park, where it grows.

There are very few records for British Columbia, and I can't find any that are recent. Samples in the U.B.C. Herbarium are from the mountains of Vancouver Island, and southeastern B.C.; but not from the mainland coastal ranges.

Terry Taylor

- 10-16 Pitch-In Week Sponsored by Outdoors Unlittered. For info on what your community can do write: 502—455 Granville St., Van. V6C 1V2.
- 14-15-16 F.B.C.N. Annual General Meeting, Penticton (See separate feature).
- 14-16 Historic Routes Symposium, Robson Square, Van. Info from Heritage Conservation Branch, Parliament Buildings, Victoria V8V 1X4.

June

The F.B.C.N. is planning a camp in the south Okanagan June 12 to June 20. We will use the geology camp near White Lake. Other details were not available at press time. Information will be sent to all clubs. Individuals wishing details should contact the F.B.C.N. office to be put on a mailing list, please include self addressed stamped envelope.

Chairman Bert Brink

## Education committee

EDUCATION COMMITTEE REPORT  
CHAIRMAN: AL GRASS  
Attitudes

"What is a country without rabbits and partridges? They are among the most simple and indigenous animal products; ancient and venerable families known to antiquity as to modern times; of the very hue and substance of nature, nearest allied to the leaves and to the ground — and to one another."

from Walden (Winter Animals)  
Henry David Thoreau, 1854

Recently I was disturbed to read about mass 'rabbit slaughters' south of the border, done is seems, in a carnival atmosphere. As naturalists, we have certain viewpoints regarding nature — call them attitudes. I think most of us would agree that unreasonable prejudices against plant and animal species are something which we should work towards correcting. It may seem difficult to accept, but there are still strong negative attitudes against crows, magpies, ravens, shrikes, raptors, and rabbits.

Most leading nature educator's agree that one of the objectives of nature education is to change attitudes by serving up facts in a taste recipe. Education is the compliment of conservation. According to Freeman Tilden (**Interpreting our Heritage**) there can be no conservation without education. Conservation is, he argues, a natural consequence of education, but the two are not synonymous. In conservation the objectives may be to save a species (e.g. Vancouver Island Marmot) or to save habitat (e.g. an estuary or marshes). We hope, expect and sometimes demand that people have empathy with what we believe to be a noble cause . . . but why should they? The 'why' is part of education or more properly interpretation. It is in essence sparking an interest (sowing the seeds) and then cultivating that interest (the crop) until objectives (harvest) are realized.

Education issues it seems are not as appealing as those of conservation, and this is somewhat understandable. However, this does not lessen the need for a strong education effort on the part of the Federation. We do need your suggestions. What are some of the things that you think we should be doing? Write to us, F.B.C.M. Education Committee, 100-1200 Hornby St., Vancouver, V6Z 2E2.

Island on the southwest tip of Ruxton Island. **Pure Lake** Prov. park located 7 km from the village of Masset, Queen Charlotte Island, and fronting on the highway to Port Clement. An interesting feature of this park is the "bonsai" vegetation.

Two parks have been increased in size. They are: 1) **Silver Beach** Prov. Park at the head of Seymour Arm of Shuswap Lake and 2) **Haynes Point** Prov. Park where the land around lagoon near the base of the spit was added. A nature trail will be built out to the lagoon providing the opportunity of walking in a marsh environment.

**Stombeck** Prov. Park at Alice Arm in northwest B.C. has been transferred to the jurisdiction of the Federal Government. The park was less than one acre in size. **Four hundred and fifty hectares** (1080 acres) of the 3508 hectare **Mount Seymour** Prov. Park were removed from park status and given recreation area status according to the Minister James Chabot. The recreation area will encompass the alpine skiing area and include the lifts, tows and restaurant.

**Garibaldi's Black Tusk Trail** is not being closed at this time according to James Chabot. "There have been conflicting rumors about the . . . trail . . . the government has no intention of denying the public access by trail to extremely popular Garibaldi Lake and Black Tusk areas of the park. The Rubble Creek parking lot and the Black Tusk trail will remain open." Hikers are asked to watch for special signing of the area.

DEADLINE FOR SUMMER EDITION  
APRIL 15, 1982  
(Covers June, July and Aug.)

### Oops — Sorry

The following errors and omissions occurred in the Winter 1981 edition. Our sincere apologies to all concerned.

Pg. 4 . . . editor's desk . . . the address of the Friends of the Stikine was left off the end of the Stikine was left off the end of the letter. It is 4669 Drummond Drive, Vancouver, B.C. V6R 1E8

Pg. 6 . . . B.C. land . . . column two, para two should read Don Robinson

Pg. 12 . . . Burrowing Owl . . . should read Bill Munro . . .

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## Provincial Parks news

**New Flight Regulations:** under the updated regulations Minister James Chabot stated that aircraft will be permitted to land in Hamber, Kokanee Glacier, Mount Asiniboine, Spatsizi Plateau Wilderness, White Pelican Prov. park and the Purcell Wilderness Conservancy ONLY if the operator is in possession of a park use permit which has been issued by an authorized park official. Mr. Chabot added "this should cut down on the airborne wildlife harassment presently taking place in some areas, and in the case of White Pelican Prov. Park, further protect the only White Pelican breeding site in B.C."

**New Parks:** Roberts Memorial Prov.

Park, located with frontage on Stuart Channel and Yellow Point Road and **Hemer** Prov. Park, located on the shoreline of Holden Lake. Both parks are near Nanaimo on Vancouver Island. **Wistaria** Prov. Park, on the north shore of Ootsa Lake with access from the Yellowhead Highway 16. **Dahl Lake** Prov. Park, 60 km wouthwest of Prince George; includes all of Dahl Lake and adjacent Theodore Lake and frontage on the east end of nearby Norman Lake. Access from Yellowhead Highway 16. **Jewel Lake**, 10 km north of Greenwood, access from Highway 3. **Whaleboat Island** Prov. Marine Park on the west side of Pylades Channel, west of Valdez

# Save the big Cedars

There is a stand of giant cedars in the Lardeau district, north of Kootenay Lake, that should be protected so that present and future generations can easily see these venerable plants. The stand only covers a few acres bordering on highway #31, it is located 39 km north of the log dump at Lardeau.

It was first considered worthy of preserving by a respected forester with Kootenay Forest Products, now a part of B.C. Timber. The company has agreed to not cut the trees but the West Kootenay Naturalist's feel that more formal protection is in order.

Stands of giant trees are rare now, especially in easily accessible locations. It would take loggers only a day or two to fall these trees but they could not be regrown for several years. A change of company policy could easily destroy these trees.

Can we protect this stand in a way that will assure permanent preservation??

Jim Street

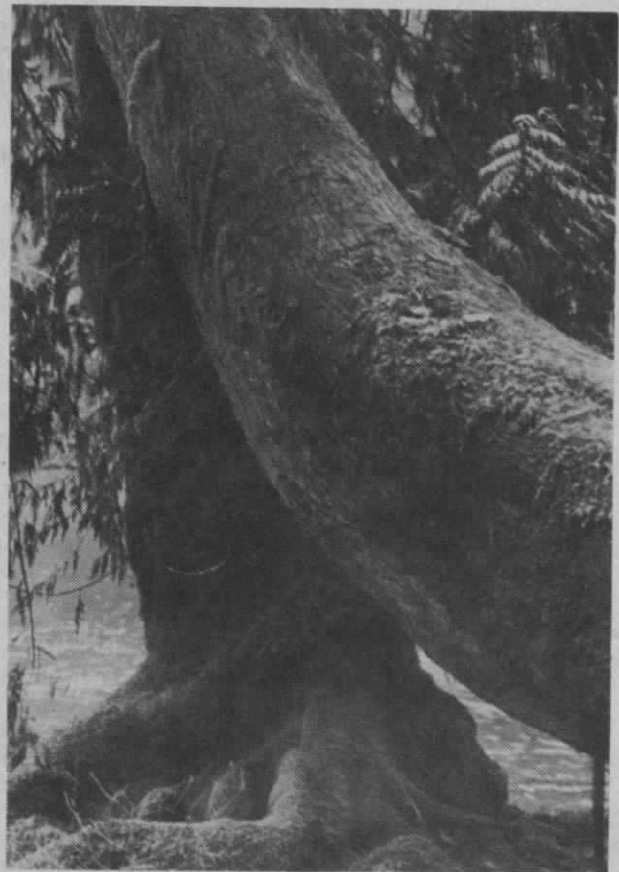


photo  
Judith Belton  
Red cedars on the  
road to Port  
Renfrew

## New Spider species

I have been advised by Dr. Charles Dondale that a spider new to Canada has been identified by Dr. Norm Platnick. In 1979, Dr. Dondale sent some Gnaphosidae to Dr. Platnick for identification. These had been caught in a pit-fall trap on the dry hillside above the old cemetery in Summerland.

This summer, Dr. Platnick wrote to say that he had found one male spider of the species **Nodocion, eclecticus** Chamberlin. The furthest north that this species has been recorded previously is in Utah! He hopes that I will attempt to find a female this next summer.

In addition, Mr. Rob Cannings turned over a large Dolomedes (fishing spider) to me. My guess was that it was D. Triton (Walkenaer), based on the text of Comstock's 'The Spider Book'. More recently, I have been able to obtain a copy of a bulletin of the Museum of Comparative Zoology by Dr. James Carico, 'The Nearctic Species of the Genus Dolomedes (Araneae: Pisauridae)'. His distributional map suggests that the specimen would be D. triton. I have as yet to have this confirmed. There is one previous written record of this species in B.C. There are other captures.

Walter Charles

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## Ecological reserves news

Three new Ecological Reserves have been named by Minister James Chabot. They are 1) at **Checleset Bay**, Vancouver Island; 10 km northwest of Kyuquot, Size: 34,650 Hectares. The area has a well established sea otter population, the only one in B.C.; it is the result of a restocking programs carried out by the Fish and Wildlife Branch. 2) in the **Skagit Valley** between McNaught and St. Alice Creeks, it will

protect an outstanding stand of pink California rhododendrons, a rare and legally protected species in B.C. Size: 70 hectares. Volunteer field wardens from the Chilliwack Field Naturalists will help to monitor and protect the reserve.

3) at **Chunamon Creek** located west of Williston Lake, 50 km northeast of Garmansen landing in the Omineca Peace region. Size: 344 hectares. It is a good example of Boreal Spruce forest types.

### Membership

- |  |         |                                       |         |                                 |        |
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| <input type="checkbox"/> Regular   | \$10.00 | <input type="checkbox"/> Active       | 25.00   | <input type="checkbox"/> Patron | 100.00 |
| <input type="checkbox"/> Sustaining  | 15.00   | <input type="checkbox"/> Contributing | \$50.00 | <input type="checkbox"/> Life   | 200.00 |
| <input type="checkbox"/> Affiliate (non-profit organization) — \$10.00 and up. |         |                                       |         |                                 |        |
| <input type="checkbox"/> Associate (profit organization) — \$10.00 and up.     |         |                                       |         |                                 |        |

Send to:

Membership Chairman F.B.C.N.  
100-1200 Hornby Street, Vancouver, B.C. V6Z 2E2

Name .....

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Membership Class..... Amount Enclosed \$.....

Renewal ..... New .....

Fees in excess of \$10.00 are Tax Deductible

# Book review

"Urban Natural Areas: Ecology And Preservation", Environmental Monograph No. 2, Edited by W.A. Andrews and J.L. Cranmer-Byng, July, 1981.

Jack Cranmer-Byng seemed to be a mild mannered person. On a number of occasions we were members of the same field trips. Dr. Cranmer-Byng proved to be an excellent birder and interpreter of local folk-lore.

What I did not know, was that this member of the University of Toronto's History Department can be very forthright. As joint editor with W.A. Andrews of the Faculty of Education, Dr. Cranmer-Byng help father this needed handbook titled, "Urban Natural Areas: Ecology and Preservation." It was produced by the University's Institute for Environmental Studies with full assistance from the Federation of Ontario Naturalists. The editors suggest in the preface, "In order to preserve urban natural areas, close co-operation between environmentalists on the one hand and field naturalists on the other is essential."

For those naturalists who must make their views publically known, here we have the "how to" handbook. The gap between lay-person and professional ecologist is bridged.

Chapter headings range from "Designation of Environmentally Significant Areas" on through to the more technical "Subsystem Studies: Geophysical Factors" with equally helpful chapters dealing with "Strategies for Legal Action on Environmental Issues"; and ending with the "Writing Up a Field Study." The authors are mostly prominent Canadian naturalists.

The 200 pages affirm the statement made found in the Introduction, "If you follow the strategies outlined in this handbook, you should be able to become effectively involved in conserving, within an urban setting, those natural areas that are likely to suffer environmental damage and deterioration. Further, you will then be ready to become involved at the political and legal level, armed with facts collected in a proper scientific fashion and presented rationally." Add this publication to your club's library.

Book may be ordered directly from:

The Publications Office,  
Institute for Environmental Studies,  
University of Toronto,  
Toronto, Ontario. M5S 1A4

Price \$12.50 plus \$2.00 postage  
and handling

Joe Lotzkar

**The Sea Stars of British Columbia**, British Columbia Provincial Museum, Handbook 39. Philip Lambert, 153 p. Queens Printer, Victoria, B.C. 1981. \$3.00.

This booklet is the first produced by our Provincial Museum on the Echinoderms of British Columbia. Of the five classes represented here (sea stars, brittle stars, sea urchins, feather stars and sea cucumbers) only the sea stars are included in this booklet. 72 species are mentioned (not 68) as occurring or likely to occur in our waters of which 36 shallow water species are illustrated and covered in the text. The remaining 36 species are known to occur at depths greater than 200 meters (33 species) or are known from only one or two specimens (3 species).

The overall size and format of this publication is similar to the previous handbooks in this series though a major change has been made in the cover to make it more attractive and serviceable. The stiffer shiny paper should prove more serviceable as the previous softer covers tended to abrade readily with use.

The introductory sections touch on general starfish structure, reproduction, larval life, regeneration, movement and feeding. Parasites and commensal organisms are mentioned but nothing is given on predation and enemies of starfish. Some mention about largest-smallest, unusual etc. sea stars would be of interest to put our species into perspective.

Users of this handbook will readily appreciate the excellent black and white photographs of each species and the drawings that clearly show pertinent details. One wonders however, that for such a colourful group of animals (at least equal to the mushrooms for instance) why at least some of the illustrations were not in colour.

The text for each species covers recognition, description, colour, distribution, habitat and biology. Generally this treatment is adequate though, particularly under the biology section the terse disjointed writing style is difficult to read and understand. For example, p. 116 Six Rayed Star "Choice of prey varies depending on place, time of year and abundance of prey, does not appear to be able to detect prey from a distance". Whether this is a result of the writer's style or the editorial process is not certain. Space limitations do not appear to be the cause as no less than the equivalent of 9 full pages between the covers are blank. As this is a handbook for the public, a more narrative writing style would be in order.

In the species covered there is a paradox. Three species, apparently recorded in provincial waters and briefly

mentioned in the text are omitted from the checklists while a number of species recorded from nearby waters but not within the province are included. A partial explanation is given but an illustrated account of the excluded species would be helpful and could help providing substantiating information.

However, despite these short comings, hopefully to be addressed in the next edition, *Sea Stars of British Columbia* is a welcome addition to our provincial fauna series and a bargain at \$3.00. In colour, at twice the price it would be the best guide to this animal group on this coast.

Bill Merilees

**The Fraser's History** (from glaciers to early settlement) published in 1981 by the Burnaby Historical Society, \$4.95, 50 pgs, obtainable from some bookstores and from Mrs. Una Carlson, 6719 Fulton Ave., Burnaby, V5E 3G9, published by Hemlock Printers Ltd., Burnaby. Edited Dr. Blythe Eagles.

To quote Kaye Lamb, retired Dominion Archivist, reviewing the publication for the *Vancouver Sun* newspaper . . . "this attractive booklet has an interest quite disproportionate to its length . . . its four short essays place the history of the river from the Canyon to the Sea in fresh perspectives". Three of the authors are or were Federation members. Drs. W.H. Mathews (geologist), P. Akrigg (1001 Place Names in B.C.), and Carl Borden (deceased archeologist. The fourth author John Gibbard is a well known authority on the history of recent settlement in the lower Fraser Valley.

Bert Brink

**Israel Nature Trails (1982-1983)**

by The Society for the Protection of Nature Trails in Israel. 13 Helen Hamalka St. P.O.B. 930, Jerusalem 91008 Israel. Offers Hiking and Nature Tours for Organized Groups and "off the beaten tract" scheduled tours for individuals. Also available is a brochure listing the English (language) guided hiking tours and rates.

Ed. note: A well illustrated 'field' guide that anyone can walk, or in some cases drive, that are free. An example here would be like **101 Walks in the Lower Mainland**, although some of the listed tours in the Israel booklet are for a week or more.

**Our cover — Red Alder**

**MALE AND FEMALE BUDS**

Swelling buds of alder give promise of new and vigorous growth. Catkin — bearing plants such as alder and hazelnut are some of first plants to "bloom" in spring. It is the smaller female catkins (like the one near the centre) which later become seed-bearing "cones".

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# Name Game

Grumble, grumble, "Why can't they leave those birds names alone?" What's in a name? We have a tendency to believe that names are etched in stone or even that they always were and always will be. The best that could be said is since day one names have been changing. With hundreds of colloquial names, it is important that stability be given to this whole question of bird names; at least here in North America. Some feel it would be nice if European and North American common names for the same species could be constant. Two examples of where this is a problem are the Common Merganser, known in Europe as the Goosander and the Oldsquaw, called the Long-tailed Duck in Europe. The annoying "habit" of the A.O.U.

(the American Ornithological Union) is to attach "American" to a species. The argument that it is a general term for the "Americas" is viewed with some suspicion. Why could not the Gray Jay have remained Canada Jay? In *Birds of North America* (Robbins, et al) there are no less than eight birds with part of the name "American" but only two with "Canada". There is even some suggestion the "someone" wants to tamper with Canada Goose, dreaming up the ridiculous name "White-chinned Goose" / don't let it happen! Tell them you're mad and that you've had enough!

It might be fun to see if you can guess the current name of the following birds listed by their old names. These have been taken from *An Encyclopedia of American Birds* by L.A. Hausman, 1944, (Garden City Publishing Co., New York)

"Field Guide to North American Butterflies" has the same names and a Common Name as well as excellent photographs of many of our species. Some time in the future our Provincial Museum will be producing a booklet on the butterflies of B.C. In the meantime, those people who would like a copy of the B.C. Butterfly Checklist should write:

Jon Shepard  
R.R.#2

Nelson, B.C., V1L 5P5

## Victory in the Courts

Literature is replete with cases of the "man bites dog" theme and here's another being an account of a cabinet minister's rebuke for HIS lawlessness. The story centers on the action of the Federation of Ontario Naturalist's staff environmentalist, **Ron Reid**. Here is his account:

"Ontario Transportation Minister James Snow and his Deputy Harold Gilbert made environmental history when both pleaded guilty to breaking the Environmental Assessment Act. This first conviction was the result of a private prosecution.

Initially concerns about the construction of Highway 404, stretching north from Toronto, centred around the proximity of a small kettle bog known as the White Rose Bog. When a botanist requested a hearing under the Environmental Assessment Act to examine the effects of the highway on the Bog's rare plants, he discovered that construction had already been underway for several weeks. After publicly rebuking the civil servants involved, Premier William Davis announced the exemption of the project from the environmental legislation, allowing construction to continue.

Now the focus of concern shifted. This exemption was different from the long string of exemptions under the En-

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### Match Column A with Column B

1. Mud Hen
2. Hudsonian Curlew
3. Water Ouzel
4. Hoboel's Grebe
5. Short-billed Gull
6. Rock Duck
7. Fly-up-the-creek
8. Gamin
9. Long-winged Goat Sucker
10. Clatter Goose
11. Red-eyed Greenlet
12. Gull-teaser
13. Hairy Head
14. Fish Hawk
15. Skunk Duck

- a. Harlequin Duck
- b. Green Heron
- c. Common Nighthawk
- d. Brant
- e. Jaeger
- f. Dipper
- g. Red-eyed Vireo
- h. Hooded Merganser
- i. Surf Scoter
- j. Red-necked Grebe
- k. Whimbrel
- l. Mew Gull
- m. English Sparrow
- n. American Coot
- o. Osprey

ANSWERS: 1-n, 2-k, 3-f, 4-j, 5-l, 6-a, 7-b, 8-m, 9-c, 10-d, 11-g, 12-e, 13-h, 14-o, 15-i.

### Al Grass

### Ledingham Wins Award

Dr. Robert Scace, Chairman, Harkin Award Committee, National and Provincial Park Assn. of Canada has written to state that the award was made to George Ledingham, the F.B.C.N. nomination, in Regina December 8, 1981. We should be very pleased. George is a founding member of the Saskatchewan Natural History Society, and editor of the "Blue Jay" for 16 years. It is the conservation of Canadian native grasslands that George's name is most significantly associated. In 1976 he wrote "for nearly 20 years now I have been convinced that our fragile native grasslands are rapidly disappearing" and that "remaining grasslands are far apart and those found are usually seriously overgrazed". With encouragement from Winston Mair, then Chief of the Canadian Wildlife Service and now a director from the Victoria club, George with others started a long and tedious B.C. Naturalist Spring 1982 — Page 14

struggle to create a National Grasslands Park in the Killdeer-Val Marie area of Saskatchewan. That the national grasslands park was created in 1981, in Dr. Scace's words "is in no small measure a load carried on George Ledingham's shoulders". We now have a national grasslands park with its characteristic birds, mammals and plants and the appeal of the wide open spaces and limitless skies.

### Bert Brink

### How Many Species of Butterfly Are Found In British Columbia?

Jon Shepard of Nelson, has recently prepared a checklist of B.C. Butterflies. This list records 163 species known to occur in the province and mentions an additional 13 which might be expected as they have been found very close to our borders. While this list is by scientific name, the recent Audubon Society's



# Notice of Annual General Meeting

On May 14, 15, 16 at the South Okanagan Naturalists' Club will host the Annual General Meeting at the Naramata Centre for Continuing Education at Naramata. There will be a special guest speaker at the banquet on May 15.

A registration form with pertinent details appears on page 15 of this newsletter. Extra copies of the registration form are available from the F.B.C.N. office.

Resolutions for A.G.M. and Nominations should be sent to the F.B.C.N. office by April 15, 1982 so that they may be duplicated and distributed before the meeting. Individuals and clubs may submit resolutions.

## 1982 Federation of B.C. Naturalists' Annual General Meeting Hosted by South Okanagan Naturalists' Club, May 14, 15, 16, At the Naramata Centre for Continuing Education Third Avenue, Naramata, B.C.

**FULL REGISTRATION** Friday night to Sunday lunch \$80 \_\_\_\_\_ Please check choice.  
Saturday morning to Sunday lunch \$55 \_\_\_\_\_  
Double or triple occupancy only. Please list names of roommates.

### PARTIAL REGISTRATION

Friday wine and cheese (coffee and cake) party ..... \$ 3 \_\_\_\_\_ Please check choices.  
Saturday meeting and lunch ..... \$10 \_\_\_\_\_  
Saturday meeting, lunch and banquet ..... \$17 \_\_\_\_\_  
Banquet on Saturday evening ..... \$10 \_\_\_\_\_

NAME \_\_\_\_\_ Tel. \_\_\_\_\_

ADDRESS \_\_\_\_\_

AFFILIATION \_\_\_\_\_ Official Capacity \_\_\_\_\_

Type of transport \_\_\_\_\_. If you will require transport from Penticton to Naramata please note arrival time and on arrival phone 492-0677 or 492-2303 for a lift.

**FIELD TRIPS.** If interested in a field trip on May 16 please circle choice:

<b>BIRDING</b>	<b>BOTANY</b>	<b>ROCK</b>	<b>GIBBARD'S GARDEN</b>
Half day.	Half day.	<b>OVEN PARK</b>	Sanctuary and Bird-boxes
Full day.	Full day.	3½ hrs. min.	1 to 2 hrs.

Transportation if required.

Registration forms to be mailed not later than April 15 with a deposit of \$30 for overnighters and full payment for partial registration.

MAIL TO: SONC, Box 375, Penticton, B.C. V2A 6K6

**CANCELLATION OF REGISTRATION NOT LATER THAN APRIL 30. DEPOSIT REFUNDABLE. Check in time from 3 p.m.**

For information about alternative accommodation please write to above address.



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# Naturalist's Holidays - 1982

## Okanagan and Nicola Valleys Birding

May 29 - June 6

Discover the tremendous diversity of wildlife found here and in the adjacent mountains. Interior bird specialties include Flammulated Owl, Poor-will and Williamson's Sapsucker. Leader: Mike Shepard.

## Haines Triangle

June 26 - July 1

A special natural history tour to the northwest corner of British Columbia. Explore extensive alpine areas, glacial outwash plains and boreal forests. See Smith's Longspurs, Gray-cheeked Thrushes, Arctic Terns and all three species of ptarmigan. Mountain flowers in bloom include Alaska Moss Heather, Bog Rosemary, Glaucous Gentian and Alpine Azalea. Wilderness lodge accommodation at Dezadeash Lake. Leaders: David Stirling & Teresa Shepard.

## Queen Charlotte Islands

July/August

We offer three kinds of tours to this exciting northern archipelago: **Graham Island Minibus Tours** - July 7-11, Aug. 18-22. Motel accommodation. **Southern Charlottes Boating/Camping Tours** - nine day trips departing July 17, 24, 31 and Aug. 7. Includes seabirds, hot springs, Anthony Island totems. **Charlottes and Inside Passage Cruise** - July 4-16. Cabin accommodation on a 135' barquentine. Includes Anthony Island totems and Robson Bight Killer Whales.

## More 1982 Tours:

Whale Watching/Long Beach Adventure	May 21-24	Quadra & Cortes Islands	Sept. 10-12
Alaska Cruise	June 13 - July 4	California Birding	Sept. 18 - Oct. 3
Pelagic Birding from Ucluelet	Sept. 5	Adventure in Mexico	Nov./Dec.

*For more details on tours, send for our 1982 Program.*

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vironmental Assessment Act that had preceded it. In this case, the assessment had already been done, the public review completed, and the process almost finished. But when the Ministry found itself in trouble, it abandoned the commitments of public involvement and legal process, and obtained an 11th hour exemption instead.

If such an attitude was left unchallenged, it would provide a precedent that could undermine the Act completely. FON could not obtain an injunction against the exemption itself, but we could, and did, prosecute for the period that construction took place without the necessary environmental approval.

Prosecutions are seldom straightforward, and this was no exemption. While the evidence of illegal construction was plentiful, we also had to establish that Snow and Gilbert had personally authorized the work. As well, we had to argue that a Cabinet Minister and a senior civil servant were not immune from prosecution under Canadian law, since this type of prosecution has been attempted infrequently in the past. With the help of Grace Patterson from the

Canadian Environmental Law Association, who acted as our counsel, a reluctant Justice of the Peace was persuaded to issue the summons for the two officials, thus overcoming the first hurdle.

No sooner had we learned of this first victory, than it all seemed in jeopardy. The Crown Attorney serving the Region of York announced that he intended to assume the case, in spite of our objections. This power to take over private prosecutions had often been used in the past to stop legal proceedings, and we feared that this could simply be the Government's way of avoiding further embarrassment.

Our fears were groundless. Only a few days after Crown Attorney began a police investigation, Mr. Gilbert made a surprise appearance in court to plead guilty on behalf of both himself and Mr. Snow. In the space of half an hour it was all over - the first conviction under Ontario's strongest environmental legislation, and the first conviction of an Ontario Cabinet Minister since 1923. A few weeks later, the announcement of the fines for the conviction provided another surprise - \$3,500 for Mr. Snow and \$2,800 for Mr. Gilbert. While their

amount is secondary to the embarrassing lesson that no man is above the law, the fact that the judge tripled the amount of fine we requested reinforce that message.

The 404 conviction is only a partial victory. After all, the original issues of protecting the special wetland habitat of White Rose Bog was never addressed, and the prosecution could only be a rear-guard action at best. But we hope that it will act as a significant deterrent to others who might ignore the Act, and that its high profile will help reawaken public interest in the environmental cause. At least one spin-off effect can be related to 404 - the Premier has announced the establishment of a permanent advisory committee to review requests for exemptions. That should help balance the scales, and encourage more effective use of the Environmental Assessment Act in future."

Joe Lotzkar

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For information on advertising and rates, please contact B.C. Naturalist Office

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