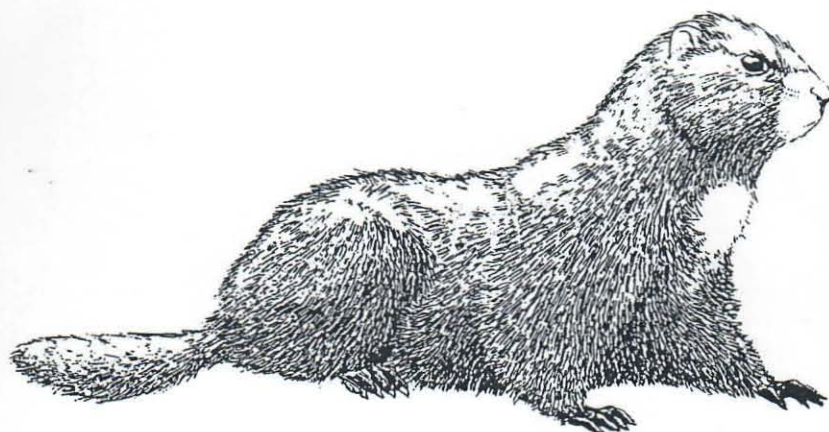
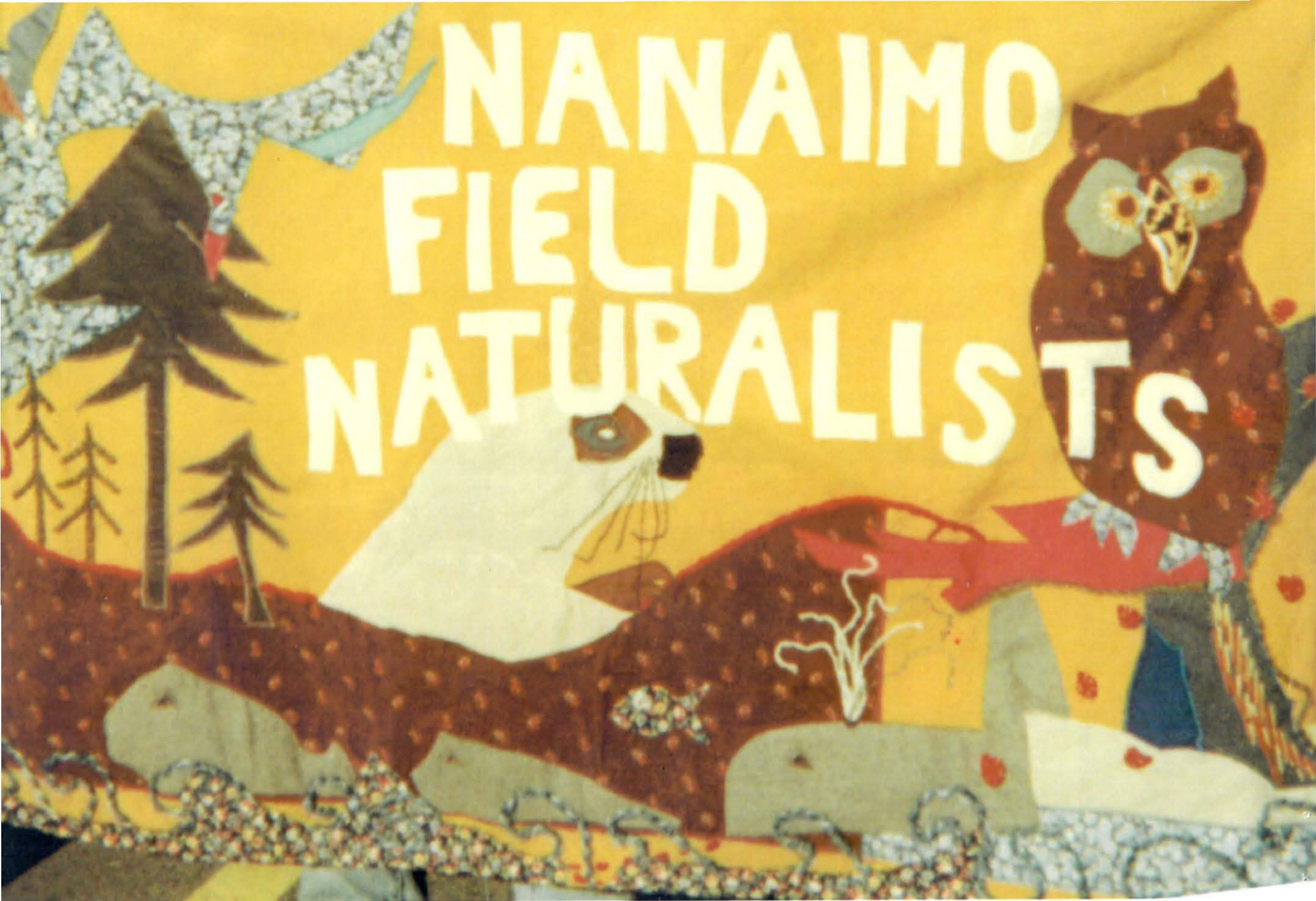


A Journal of
Nanaimo's Field Naturalists

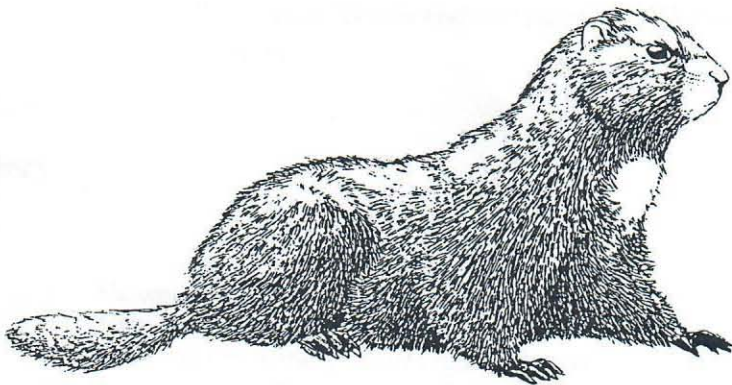


Compiled and Edited by Elthea Dale
Preface by Yorke Edwards

NANAIMO FIELD NATURALISTS



A Journal of
Nanaimo's Field Naturalists



Compiled and Edited by Elthea Dale

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Acknowledgements

The completion of this book might not have happened as easily without the encouragement of a number of people, but especially Bill Merilees. He provided background material whenever I called for help, and kept me "on track" with factual data where I was wide of the mark in my interpretation of certain issues. If he couldn't produce what I was looking for, he supplied me with the names and phone numbers of the 'right' people to contact. I am especially indebted to him for supplying the correct names of a number of the plants listed in Appendix III. My thanks are also due to Yorke Edwards for writing the Preface to this book and for his kind words after reading only a rough draft copy.

About ten years ago members of our Club created the banner which identifies the Nanaimo Field Naturalists at mall stalls and wildlife festivals. Beryl Keyes designed the pattern and Katherine Ikona supplied the material and sewing skills. The decision to use a colour image of it as the frontispiece to this book found wholehearted support from all those whom I consulted.

Peter Van Kerkoerle put in many hours to create pen and ink drawings to enhance this journal in his own special way. He has my heartfelt thanks. I also want to thank Anneke Van Kerkoerle for her helpful suggestions and for keeping me straight on dates and the spelling of names, especially from the earlier years. My appreciation is extended to several kind people who searched their homes for photographs, editions of the *Thrush* and other club records, namely, Kanya Baillie, Arline Haddaway, Katherine Ikona, Gwen Johnston, Jill Sims, and Anneke Van Kerkoerle.

Included in the Appendix to this book is the 25-year record of the Club's participation in the Audubon Society's Annual Christmas Bird Count in the greater Nanaimo area. The credit for putting together the meticulous details of that tally go to Peter Van Kerkoerle and Steve Baillie. I am also very grateful to my "proof-readers" Kathy Jackson, Bill Merilees and Arline Haddaway, all of whom made sure my spelling, punctuation and grammar stayed within acceptable boundaries!

I owe a very special thank you to the Club's past presidents who took the time to contribute their memories, which have been included at the beginning of each segment of this journal. Jerking oneself from a busy, hectic present to return ten or twenty years to the past in search of a memory, isn't the easiest of tasks. Happily for all of us, they did so, adding an indispensable dimension to this chronicle.

Finally, I especially wish to thank all the members of the Nanaimo Field Naturalists who voted on a motion at a meeting in September 1996 giving the launching of this history the 'go ahead'; if they had defeated the motion, I wouldn't have had the good fortune of having been so pleasantly occupied these past several months.

E.D.

PREFACE

You are holding a lively history that will maintain your interest even if you are not a member of the Nanaimo Field Naturalists. To the end there is a rewarding mix of presidents' memories, thoughtful quotations, startling comments, glimpses of municipal battles, outstanding field experiences, and kind words for members who made a difference over the years. With editorial skill this scramble works well. Start anywhere and begin to read.

Naturalists gathered into societies have a rich history of keeping our culture aware of the beauty and necessity of wild lives dwelling in wild places. We are the foundation of hope for the survival of those lives and places in our rapidly changing planet, for the naturalist sees what others do not. About this, Thomas Huxley wrote:

"To a person uninstructed in natural history, a country or seaside stroll is a walk through a gallery filled with wonderful works of art, nine-tenths of which have their faces to the wall."

Only the experienced naturalist sees what the eye is looking at, knows what the ear is hearing, identifies what the nose is telling.

Naturalists save Nature...

...they should save their histories too; otherwise they are lost in what soon becomes a very dim past.

Yorke Edwards

[Yorke Edwards was for many years, Director of the Royal British Columbia Museum in Victoria, B.C. He also contributed long service to the Federation of B.C. Naturalists Foundation.]

About this book...

Twenty five years ago, Canada beat the Russians in the very last few seconds of the most memorable international hockey game ever played. Perhaps not quite so exciting but other, nonetheless remarkable events also occurred in 1972. Twenty five years ago, for example, Nanaimo got cablevision for the first time; and twenty five years ago, naturalists in Nanaimo sought the society of one another and together formed an official group:- the 'Nanaimo District Naturalists'.

The idea of a club history surfaced during an executive meeting in 1995 while we were discussing these milestones. Believing that the Club's beginnings and achievements should not be forgotten, I raised the matter with several members, Bill Merilees, the Van Kerkoerles, Steve Baillie for example, hoping one of them would tackle the task of writing its history. They all declined, suggesting pointedly that since it was my idea I should do it! Me!!! I didn't want to do it! I had only joined the club in 1990 and knew nothing about its history. Nothing!!! In the end, however, I couldn't back down after "fussing" so much about it, so, the task of gathering boxes of club records from the four corners of Nanaimo began. Regrettably, minutes of the club's meetings between 1972 to 1982 were missing; I would have to rely entirely on correspondence and newsletters for those years. Next came hours and hours of reading and sorting the material into manageable, logical order.

Later, in 1996, past presidents were contacted to ask for their contributions to the book. While waiting for their replies, I decided to try to answer my own questions of why, how, when and where the Club came into being. I still wasn't quite sure how to go about writing this journal but as I started to jot down notes, the book seemed to take control and write itself through the articles ("voices") of the club members. It dawned on me finally, that I wouldn't have to write this history because the members themselves had already written it. It was all there, in their newsletters and other club records. It was so easy! My contribution would simply be to edit the material and occasionally provide an *Editor's Note* to clarify or expand on a subject. In some cases, the *Editor's Notes* would serve to bring the reader up to date on issues and events of the past.

The criteria used for including *any* item in this volume of memories, had to be very broad indeed: informative, amusing, or intriguing (or merely interesting) - and if an article met all three (which rarely happens), so much the better. Of particular interest were those issues which had concerned the club membership most, because of their impact on the Nanaimo area and Vancouver Island specifically, or B.C. generally.

As readers move from earlier years toward the present, they will sense a shift from social nature hikers to the more concerned environmental group it has become. The club's greatest contribution to the community has been 'educating' the public on its natural heritage, and this aspect of the membership's activities has clearly grown and strengthened over the years. It hasn't been an easy task. At the beginning of each section the reader will find a quote from The Little Red Book's "*Little Green Book - Quotations*

On The Environment" published in 1990 by Pulp Press Book Publishers. It seemed to me that it would be appropriate to include these quotations, which were like small mirrors reflecting the narrow attitudes of the whole North American society towards our natural world over the past quarter century. Such reflectors might help to remind the reader why it has been so difficult for the Nanaimo Field Naturalists to be heard or heeded, at least until very recent times.

To answer the question of what a naturalist is, Barbara Black suggests, in her *History of the Federation of B.C. Naturalists*, that they are explorers driven by curiosity, who take that extra minute to observe, to lift up a stone and peek, to wait by the water's edge for a sign of aquatic life, to record the workings of the natural world, and, one could add, who often feel compelled to relate to others the important aspects of their observations.

In registering twenty-five years of such activities by our members, I was mindful that no two people ever read the same journal in quite the same way; therefore, every present and future naturalist who peruses this diary will undoubtedly react to it differently. My hope is that you will find enjoyment in both meeting your 'predecessors' in the following pages, and interpreting their observations, and their words and deeds, to suit yourself. This book was written, after all, by them, for you!

Elthea Dale

*"There is a pleasure in the pathless woods,
There is a rapture on the lonely shore,
There is society, where none intrudes,
By the deep sea, and music in its roar;
I love not mankind the less, but nature more,
From these our interviews...."*

- Lord Byron

1972 - 1975

On The Question Of Who Shall Watch The Bird Watchers:

"The conservation movement is a breeding ground of Communists and other subversives. We intend to clean them out, even if it means rounding up every bird watcher in the country!"

--John N. Mitchell, U.S. Attorney

-General, 1972



David Kerridge

Congratulations to all of us on attaining the 25th Anniversary of the Club. We must have started on a solid foundation to have achieved such a milestone and in

such good shape - a solid membership and financial stability. When the new staff of Malaspina College arrived at Nanaimo, we were directed by the college president, Dr. Carl Opgaard, to do all possible to make an impact on the community and to make our presence felt in a positive way. I, along with others, found this opportunity in assisting in the formation of the Nanaimo District Naturalists. The original membership was a small, close-knit group - more like an extended family - and we had many pleasant experiences. To us, the activities and functions were particularly memorable as we had a young family and these became our family outings. One such outing that comes to mind was with Adam Szczawinski Provincial Botanist and an authority on B. C. mushrooms. We spent a soggy day collecting and identifying mushrooms. The day finished up at the McKenzie-Grieve's home in Lantzville where we were instructed in the fine art of

mushroom cooking and, of course, eating! What a delicious activity!

Other memorable outings include trips to Rhododendron Lake, a fossil trip to the shale pits and cold bird outings - particularly when we became involved in the Christmas Bird Counts. The warmth of our pot luck dinners which followed the bird counts really drew us together as a big, extended family.

Early on, we began our annual picnics at the van Kerkoerle's and this became a tradition within the Club. Great times and food are shared by all members at this function no matter what their personal interest might be - birds, flowers, rocks, bats etc.

Remember those sourdough chocolate cakes made by John Russell? uhm, uhm, good!

There was a wealth of talent to be tapped in those early days for guest speakers, and our meetings were seldom boring, even for the younger members. One young

family of girls (the Graves) were known as the "cookie monsters", a name well earned at coffee time.

One of those early speakers was Dr. Lewis Clark who gave us a delightful presentation on the plants of B.C. His visit had special meaning to all of us as he passed away soon after his time with us.

Sitting here reflecting on our many experiences with the Club bring back so many happy memories of not only activities, but the warm relationships developed with its members. We are thankful that we were a part of all this and are so pleased that it has proven to be such a successful group. It has come to play an important role in guiding the awareness of environmental issues in the Nanaimo area. Here's to the next 25 and more! Keep up the good work!

Sincerely, "David Kerridge"

Who(were they?): When (did they?):
Why (did they ?) ;What (did they?):
and Where ?

Who and When?

Malaspina College opened its doors in 1969, and as each new department head arrived, he was challenged to become involved in the community in some way pertinent to his own speciality. Dave Kerridge and Al Hawryzki met with their colleague and friend from the Nanaimo Senior Secondary School, Biology teacher Molly Byrne, to decide how best this challenge might be accomplished. The idea of the naturalist club was born out of their friendship with Dr. Tom Taylor of UBC and contact with Elton Anderson, President of the Federation of B.C. Naturalists (FBCN), which led to a meeting of these five people on March 9th, 1972. Dave Kerridge put a notice in the newspaper to advertise the formation of the group and the rest is history!

They were a small group at first, but within two months their numbers had increased to 13 family and 9 single memberships. The Club's first *pro-tem* executive were: Mr. Dave Kerridge (President), Mrs. Winnie Espitalier (Secretary/Treasurer), Miss Molly Byrne, (Vice President), Miss Elaine Waddell (Convenor), and Miss Denise Webb and Mr. Allan Hawryzki. This Executive wasted no time in putting together their first Constitution [see Appendix V] and club members approved and passed it at their March 28th meeting. By their meeting on April 18, 1972, the "Nanaimo District Naturalists" had been officially adopted as the name of the group.

Why?

The Club was formed initially not by 'activists' determined to put a stop to development from desecrating Nanaimo's rich biodiverse landscapes and seashores, but rather for its members to share their collective knowledge, experience and pure enjoyment of the natural world. In fact the objectives of the Club as stated in its original Constitution was "*to promote enjoyment and understanding of our natural environment...*".

Dave Kerridge was a teacher of biology; Winnie Espitalier loved rocks and shared her vast knowledge of the geology around Nanaimo with her fellow naturalists; Molly Byrne was the Club's first plant director. Later that year Peter and Anneke Van Kerkoerle joined the Club and Peter became its bird director. (By the late 1970s, the term "plant" and "bird" directors disappeared from the list of executive positions.)

What and Where?

On March 28, 1972 the Club held its first *official* meeting and the guest speaker was Mr. Ralph Hutchinson whose topic was "Alpine B.C." The Club's very first outing was to Goldstream Park on April 15th.

Mr. Ted Underhill was guest speaker at their April 18th meeting; he spoke on "Spring Splendour". On April 29th members went on a fossil and botany outing to Two-Jack Lake. On May 7th they met other naturalists from all over Vancouver Island at a large rally at the Englishman River Falls Park. They examined Dodds Narrows at low tide on May 14th, and on June 3rd, nearly all 35

members, with their friends, hiked into Rhododendron Lake! The Club held its first bird outing, to Chase River and Jinglepot marsh, on June 18th.

By May this busy group had decided to meet the third Tuesday of every month. They were also contemplating the design of a Club logo for use on their letterhead.

[It took 15 more years to accomplish this; it wasn't until 1987 before Marmota vancouverensis was adopted as the official club logo.]

At this time, club members were also considering if they should avail themselves of membership in the FBCN for one year at no cost, and thereafter at 50c per member. *[Editor's note: 25 years later this fee had risen more than 1000% to \$12.00 per membership]*

During the summer those happy naturalists and ramblers of 1972 explored Newcastle Island; went on an over-nighter to Pachena Bay (Bamfield); and in early September they visited Forbidden Plateau and Paradise Meadows to view the alpine flowers.

Forbidden Plateau etc

(Jack Ware)

We met at 8:00 a.m. on a beautiful September morning at the Courtenay courthouse. By 8:20 we were on our way to Paradise Meadows - a 17 mile drive from Courtenay. Upon arriving at the trail I counted a total of 30 people. Don Boulton was tail-end man to see that no one lagged behind. It was a job to drag some of these naturalists across the meadow because of the many varieties of plant life they found.

We strolled past Battleship Lake, No Name Lake, then Lady Lake and finally Croteau Lake. We arrived at Croteau around 11 a.m. where most of the group stopped, ate lunch and got cold. About a dozen of us continued to Hair-trigger Lake via Murray Meadows where we ate lunch and enjoyed the view of Mt. Albert Edward.

.....

In the October issue of the Club's monthly bulletin, the President, Dave Kerridge wrote:

"Our outings will become more localized from now on as weather will begin to take its hold on us. We do, however, have some shorter but interesting things planned. Of immediate interest however is our up-coming first indoor meeting of the season. This will be on Tuesday, October 17th, 1972 at 8:00p.m. in Beban House located on the Exhibition Grounds at the far end of Bowen Road. Just follow Bowen Road past Slegg Bros. Lumber and turn into the Fair grounds. The house on the left as you enter the gates is Beban House.

"Our guests for the evening will be Mr John Comer and Mr. Stan Baker from the Duncan Naturalists' bird group. They will present a talk and slides on local birds. Also Mr. Comer will talk to us about the annual Christmas Bird Count. This is an annual thing and is held all across Canada at this time. It is used to indicate the changes in bird populations and migrations. We should consider participating in this venture throughout the Greater Nanaimo Region. Nanaimo has participated only once before. *[Ed. note: in the 1960s. See page 64]*

"A general meeting of the Federation of B.C. Naturalists will be held in the Argyle Room, Island Hall Hotel, Parksville on Saturday, October 14th at 9:00 a.m. **Dr. Roderick Haig-Brown** is the dinner speaker. The cost for lunch and dinner is \$8.00. A field trip will be held the following day to Cathedral Grove and Little Qualicum Falls.

"We have been invited to visit the farm of Rev. Ben Dixon in Cassidy and to use the area at any time. It is 250 acres of land kept as a wildlife area. [*located near the Van Kerkoerle's farm.*] There is an active beaver colony, a heron colony, as well as a duck marsh. It is only about 10 miles from town. Some members may find it interesting to help further develop the waterfowl marsh - the dam apparently needs repairs.

"Rev. Dixon, [who comes from a long line of renowned falconers] can easily handle these wild birds better than any person I have ever met."

[*Ed. Note: According to Dave Kerridge, Mr. Dixon carried out his own captive breeding program of falcons and released their offspring in this area over a period of several years.*]

At their Annual General Meeting in November, Rev. Dixon was guest speaker and, not surprisingly, spoke on "Birds of Prey". In December the Club participated in Duncan's annual Christmas Bird Count in preparation for its own (first) count on December 30th. Peter Van Kerkoerle reported on a bird outing by the Club which took place on November 18, 1972:

"Though the weather was not very agreeable, 11 members took the time to

do some birding in preparation for the Christmas Bird Count. The temperature was 38°F and a cold rain was falling most of the day. Long Lake was our first stop. Here 5 species were counted: 1 common Golden eye, 1 female Greater Scaup, 6 Bufflehead, 8 Mallards and 1 Glaucous winged Gull. Not much really, but it gave us one species not seen at any of the next stops, i.e., the Mallards.

"The Morningside area was more interesting and we made two stops. Beside the common gull species, we saw the 3 kinds of Cormorants, large rafts of Western Grebes, 50 plus Common Loons, 5 Red necked Grebes and a few Horned Grebes, 1 Harlequin Duck and 20 White winged Scoters.

"Pipers Lagoon was flooded and only 3 Bufflehead were inside the cove. On adjacent waters there were more birds of which a raft of about 300 Western Grebes, not far out, was the most impressive. A few male Bufflehead were arguing over the less numerous females. Where were the Surf Scoters or the Black Scoters? Red necked and Horned Grebes seemed to be spread out thinly over wide areas. From here we decided to go home as several colds were in the making. A short stop at Departure Bay turned up Barrow's and Common Golden eye, 1 female American Merganser and last, but not least, 2 Marbled Murrelets.

"All together the number of species seen was not large, but poor visibility, steamed up glasses, cold hands etc, taken into consideration, it was not bad at all."

[*Editor's Note: On their CBC on Dec. 30th, they had two unusual sightings: a flock of sleeping Band-tailed Pigeons high up in a*

Douglas Fir, and 5 Short-eared Owls on the Estuary. They ended the day at Elaine Waddell's to compare notes on the accumulated data for the day. For the results of all 25 Christmas Bird Counts, 1972 -1996, see Appendix IV.]

.....

During 1973 the Club's meetings were moved to Room 108, at Malaspina College where they remained for several years. The issue in Nanaimo that year was the Nanaimo Harbour Commission's plan to build a Port at the mouth of the Nanaimo River Estuary. The Nanaimo District Naturalists presented their position to the Canadian Harbours and Ports Planning Committee public hearings in January 1973. In part they stated:

"A local authority on raptorial birds has noted that winter visitors to the estuary are Gyrfalcons, Snowy Owls and Rough-legged Hawks. Marsh Hawks and Short-eared Owls nest in this area. A pair of nesting Peregrine Falcons have been sighted in the estuary region. This is known as the most southerly active eyrie of the Peregrine Falcon. The Nanaimo District Naturalists request that a more thorough and comprehensive study be made to determine exactly what environmental damage would be incurred should the present plan be put into effect. This study should be carried out before permission is granted by the Federal Government for the development of this Port."

A noteworthy paper was submitted at this time by club member Dr. David Narver who vividly described the **Nanaimo River Estuary** in 1973. [See Appendix II.]

.....

The year 1973 ended with the President's Annual Report being published in the Club's Vol.1 No.1 issue of what later came to be known as the *Thrush*:

"At our 1972 General Meeting the [oral] report given covered our activities from our begining as a Club in March through to November. This is the first [written] Annual Report which encompasses a full year's activities. It has been an exciting year and the Club has certainly expanded, taking in a wide scope of activities.

"On December 30th, 1972 we completed our first Christmas Bird Count. With the help of members of the Cowichan Bird Society we had a total attendance of 16 persons. It was a miserable day, but most successful, as we were able to log 80 different species and nearly 9000 individuals. The day was brought to a warm ending at Miss Elaine Waddell's home where all enjoyed a buffet supper.

"The speaker for our December 12th meeting was Mr. George Potts. He gave a most delightful slide show and talk on ancient Mexican architecture...as you remember, much of it by candlelight since the lights went out for a time.

"Starting off our 1973 season we had our own Mollie Byrne give us a slide presentation on flowers on January 16th at Beban House. The following month, on February 20th, our Winnie Espitalier gave us an excellent program on the geology of the Nanaimo region. This was followed by a geology field trip on the following Saturday.

"Our club submitted its position to the Canadian Harbours and Port Planning Committee on January 25th concerning the proposed development in the mouth of the Nanaimo River Estuary.

"On March 20th we enjoyed a presentation by Mr. Dave Stirling, of the B.C. Parks Branch, on the birds of Australia. On April 17th we held our last indoor meeting for the Spring. Our guest was Dr. John Kelsall of the Canadian Wildlife Service and his presentation covered some of the work he has carried out in the Arctic on Caribou.

"We had an outing to Mr. Dixon's farm on April 28th and on May 13th a few members had an interesting trip to Gordon River to see the pink Easter Lilies. An evening expedition led by Mollie Byrne to a Beaver Pond on the Nanaimo Lakes Road was held on May 15th.

"Our biggest and most successful field trip was the Low Tide excursion to Dodds Narrows. Kathy Mounce was our leader and after much playing around in the surf we all headed to the Van Kerkoerle's for our barbeque picnic. Rhododendron Lake was visited in June while the flowers were in their glory.

"The summer was a disaster, mainly due to the fire closures which kept people out of the forests. The next get together was at our September 28th indoor meeting at Malaspina College. We had over 50 people attend the film *High Country* by **Chess Lyons** and narrated by Ruth Stirling.

"Our normal meeting place, Beban House was too small and we had some difficulty locating a hall of suitable size. We were successful in obtaining the large room (108) at Malaspina College on the 4th Friday of each month. We hope that Friday evenings will attract larger crowds to our regular meetings and we will therefore continue to meet on Friday evenings.

"On October 20th a few hardy souls managed to brave the weather in order to visit Hamilton Swamp at Qualicum. Our indoor meeting held on October 26th was the most successful so far as we attracted 85 people to **Dr. Lewis Clark's** slide presentation on *The Wildflowers of British Columbia*.

"Our biggest venture this year has been the development of our own publication. It has taken the better part of the year to get it under way. We are most grateful to Peter van Kerkoerle for the cover design and find it exciting as the Varied Thrush (our cover bird) has been put forward as the potential bird emblem of British Columbia. If it becomes recognized as our provincial bird we may be the first group to make use of this emblem. Our Annual General Meeting is being held November 23rd and the Christmas Bird Count on December 29th.

"Thank you for having me as your President this year and supporting me the way you have. Thanks too to those members of the Executive who have put so much into making 1973 a successful year. They have been: Mollie Byrne (Vice President and Plant director); Marg Kerridge (Secretary/Treasurer); Juanita Russell (Student director);

Winnie Espitalier (Rock director); Mr. and Mrs. Peter van Kerkoerle (Bird directors); Elaine Waddell (Social convenor) and Barbara Graves; and Allan Hawryzki. The very best to all for the year ahead. - *D.C. Kerridge*"

The Club's first annual Financial Statement:

Balance: Oct.31, 1972 **\$82.91**

Credits:

Dues Received	\$155.00
Silver collection	11.95
Bank interest	1.04
	<u>167.99</u>

Debits:

Coffee Urn	16.85
File Box	6.25
FBCN dues	17.00
Audubon (CBC)	28.53
Beban House	14.50
Barbeque	23.17
Bulletin cover	6.47
Xmas Cards	30.00
Coffee	13.37
Misc.(stamps etc)	9.77
	<u>165.91</u>

Balance Nov. 15, 1973 **\$84.99**

Christmas cards are now available, at a cost of \$1.25 a box.

There were two articles from that very first issue of the *Thrush* which will also be of interest. The first was an article by Mollie Byrne:

Arbutus (Arbutus menziessii Pursh)
(Molly Byrne)

This tree, also known locally as the Pacific Madrone, shares our cover picture with the Varied Thrush and it must surely be a tree which we both love and curse. With faithful regularity

through the year, it covers our gardens, sun-decks, carports, walkways and evestroughs with bark, or leaves or berries or combinations of these. Yet it is a tree which always intrigues visitors from other parts of the world, for although the genus is represented elsewhere (for example the Strawberry tree, *Arbutus unedo*, of Europe), our species is perhaps the most striking. In spring its large clusters of waxy flowers show clearly its relationship to the heathers, the blueberries, the salals, and the rhododendrons. The warty, orange fruit seen in October are edible, but scarcely worth it; strictly for the birds.

It is the annual cyclic changes of bark on the smooth turgs and young trunks that are perhaps the most fascinating feature of the tree. In midsummer the old foliage turns yellow and begins to fall, and at about the same time, the tough bark curls up and peels off revealing a beautiful green underbark. This underbark is destined to turn gradually to a cinnamon colour on the bare smooth limbs. On dead trees the branches and turgs reveal the details of their geometry, with unique curves and angles which make them useful as decorative items. The wood itself is hard, strong, close-grained and heavy and is too rare for general use. Let us hope that Canada's only broad-leaved evergreen tree, a delight in our landscape, will not become rarer.

.....
The other article was:

Fossil Hunting in the Nanaimo Area
(Winnie Espitalier)

Nanaimo would certainly not have been established as a settlement as early had our geology been different. It was the

discovery of coal around 1849 which really got things started. Geologically speaking, we are sitting on a basement of altered basic volcanic rocks; altered sedimentary rocks, and a few small granodiorite bodies, over which we have a cover of surficial materials, a mixture of glacial and non-glacial environments. All around us we see rocks which are of the Upper Cretaceous age.

The Cretaceous period (named for chalk) began about 135 million years ago and lasted some 70 million years. During this time there was a major advance of the sea and a mixed continental and marine sedimentation took place. It has left us with a mixture of conglomerates, sandstones, shales and lenses of coal. Today the coal has been pretty well mined out, but we can still collect marine fossils and land plants which are a part of this geological history.

Ammonites are fairly plentiful and are often found well preserved embedded in hard, spheroidal concretions associated with shales. Specimens have been recorded of nine families, eighteen genera and thirty-four species of ammonites, all found on Vancouver Island. Of these, twelve species are common to the Nanaimo area.

Among other species of marine fauna, gastropods and pelecypods are found, but if they are contained in rocks without the concretionary shield, these shells will disintegrate when exposed, leaving only the internal mould behind. Impressions of cephalopods can be found, but are difficult to collect. Some good places to hunt might be the Nanaimo River, Haslam Creek, Elkhorn Creek, Brannan Creek, Maple Bay area

and Salt Spring Island. One also finds about 92 species of fossil plant remains in the Nanaimo Group, as well as some fossil wood.

One type of fossil which we do not find however, are remains of animal, bird or reptile life. One explanation might be that our area did not have suitable conditions for their life styles for any great lengths of time.

So...interesting field trips can be made hunting for these relics of the past. Good specimens are interesting and quite durable when collected carefully and displayed safely. And what better excuse to go out for a ramble on a winters day when there are no flowers to photograph or mushrooms to collect.

.....

A browse through the 1974 issues of the *Thrush* turned up these interesting nuggets:

- ☞ March 22: Mr. Stan Devereaux, Education Officer with F&W Branch will be speaking to us about their "concern for naturalists".
- ☞ May 10: a visit to the late Dr. Berkeley's Garden on Stephenson Point Rd. "This unique garden includes plants from around the world" [including the only giant Red wood - *Sequoia sempervirens* - on Vancouver Island.]

Mollie Byrne subsequently reported on that excursion:

"On May 10th a small group visited the gardens of the home which belonged to the late Dr. Berkeley. Although he was a zoologist by profession, he gradually

created a unique garden on his property. It contains a profusion of exotic shrubs and trees, many of which remain a mystery to us because their name tags have been lost or obliterated. Several different species of *Rhododendron* are to be found, including one that has almost circular leaves.

Across the front of the house a huge Wisteria vine climbs and there is an old-fashioned Medlar tree in the orchard area. In fall the garden is vivid for there are many varieties of *Pyracantha*, Spindle and Barberry whose berries provide a range of yellows, oranges and pinks.

For several years now the plants have not had the care they need and are untrimmed and overgrow one another. The garden may be lost to developers, but this Club is making efforts to find out about, and possibly influence, its future in the hope that there may be a chance for its preservation."

[Editor's note: When I asked Mollie about this project she replied: "the property was offered to UBC's Botanical Garden which could not accept, and I believe Malaspina College also had to reject it. For many years now it has been a fitness centre under various names, currently The Lifestyles Complex. The garden is in decline."]

- ☞ Sep 27 & 28: Mr. Graham Beard of the Qualicum School District and anthropologist presented an interesting evening on local Indian culture. The following day, Graham Beard and Winnie Espitalier joined forces to lead the group on a geology walk looking for interesting rocks and possibly a few Indian artefacts as well. Meeting place as usual was the Northbrook log cabin.

- ☞ A hike up Mt. Arrowsmith, and a walk through Cathedral Grove was the plan for November 9th. [Both? in ONE day?!]

- ☞ From the "Cooking Corner" - a regular feature of the early *Thrush* - Mollie Byrne submitted this recipe:

Oregon Grape Jelly

Simmer "grapes" with minimum amount of water.

When they are well cooked you may need to break them up with a masher.

Strain through cheese cloth.

For each cup of liquid use one cup of sugar (or less if you prefer).

Bring to a boil and continue boiling until any standard "jelling" test is positive.

This is a tart jelly that can be used on toast or with meat.

and Allan Hawryzki authored this one:

Hawthorne Jelly

Gather berries in the Fall when they are ripe.

Place in saucepan and barely cover with water.

Cook until soft. Extract juice.

Use pure juice or mix 3/4 hawthorne to 1/4 apple juice.

4 cups juice, 1/4 cup lemon juice. 7 cups sugar, 1pkg. pectin.

- ☞ The youth wing of the Nanaimo District Naturalists had two successful field trips under their belt and planned an expedition to the west coast.

Naturalist and Hunter Can Work Together

(Peter Van Kerkoerle)

The recent shooting of a Trumpeter Swan on the Nanaimo River Estuary prompted me to write a letter to the Free

Press Editor on behalf of the Nanaimo District Naturalists. Action came shortly thereafter when Mayor Frank Ney called a Council meeting and invited us to attend. In preparing for the meeting, the Fish and Wildlife Branch, with the cooperation of the Rod and Gun Club, SPEC, and the Nanaimo District Naturalists, drew up a 4-point plan to protect the Estuary as a migrating bird habitat. The 4 points proposed were:

- 1) hiring of a full-time enforcement officer during the three-month duck hunting season;
- 2) total closure of the area to all hunting for the remainder the year (Indians excepted);
- 3) only shotguns to be allowed during hunting season; and
- 4) erection of large signs on Maki and River Roads and Duke Point Road.

The proposal was accepted by Council and a one-year trial period will indicate if it is successful in improving the situation.

Dave Kerridge and I felt that by agreeing to hunting during the season, we would gain more cooperation from the other groups, than by insisting on a total ban. The old stand of many naturalist clubs to ban all hunting has only brought about distrust and useless fighting. We understand that the local Rod and Gun Club have over 450 members. This group has worked on many worthwhile projects which benefit not only the hunted species, but also protect habitat. For example, just think of the cleaning of the Millstream River, or the colony of Vancouver Island Marmots which were

saved by the mutual efforts of the Rod and Gun Club and our own club.

On the Nanaimo River flats we have made a joint effort to stop the indiscriminate slaughter of wildlife by thoughtless individuals who have damaged the image of more responsible hunters. If it works, it will not only benefit the hunter, but will achieve in large part the aims of the naturalists as well.

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- ☞ On Feb 28th, 1975 Janet Stein from UBC gave a fine talk, with slides, on seaweed along the British Columbia coast. She also brought samples of edible seaweed which were nibbled by some, and munched down by others!
- ☞ At the last indoor meeting of the spring session, Ted Underhill from Victoria shared his wide knowledge of the wild plant world with club members. His talk and slides provided a better understanding about B.C. berries. He even gave them a taste of some of his wild berry jellies.!
- ☞ The annual barbeque was held a week earlier that year because Dave and Marg Kerridge were leaving for Texas within the week to take up graduate work for a year at Texas Tech University. They were presented with the book *Rivers of Canada* with expressions of gratitude for all they have done for the Club during the previous three years. This gathering was enhanced by the quarrelling of Rufous Hummers at

the feeder and the acrobatics of a multitude of swallows; the eating of Peter's hamburger by his own chicken; and the inability of Dave Denis to back out of a ditch! Molly Byrne would be replacing Dave Kerridge as president; the job of the overloaded Secretary/Treasurer, Marg Kerridge, was divided into two: Kitty Larnder as the new Treasurer and Gloria Knowles took on the job of secretary.

Rosewall Creek

(Winnie Espitalier)

Last fall ten of us took the path up the River near Rosewall Creek in the morning and spent a leisurely time looking at a variety of flora, including yew and cottonwood. The river was at a record low this year and we crossed back and forth looking for specimens of *dallasite*, a rock favoured by lapidaries. Rosewall Creek flows out of an area with classic pillow lava structures. It is the alteration of interspheroidal material from this formation which is the source of this ornamental rock. Years ago someone picked up pebbles of this material on a beach below Dallas Road in Victoria. Not knowing what it was they just called it *dallasite*.

In our geological history Island volcanoes erupted, or flows occurred under sea water. Certain lavas were erupted in just the right quantities to maintain a balance between cooling and onward flow giving rise to a sort of bulbous budding which was caused by the rapid chilling action of the water on the highly fluid lava. This chilling would cause spalling off of glass fragments from the outer crusts of the pillows and

partially filled the interspheroidal spaces with breccia; these spaces existed due to the failure of growing pillow to fit perfectly together. Occasionally one of these pillows would crack during expansion, and a portion of its liquid contents would be spilled into the spaces. All this contributed to the varied patterns we find today in river-worn and beach-tumbled cobbles.

Spaces which remain unfilled become the home of crystallized materials. It is not uncommon to pick up one of these stones and note a "pocket" or "vug" which contains terminated crystals, usually quartz, damaged by years of beating about in the river. Up in the source area you will find excellent examples of these containing *quartz*, *calcite*, *zeolite*, *prehnite* and *epidote* crystals in euhedral form, if you are lucky enough to find recent road building, or are in the company of a muscular, hammer-wielding rockhound.

An attempt to visit the fish hatchery near the mouth of Rosewall did not materialize because of a locked gate.. As it was a fine, hot day most of the group decided to visit the beaches in the area. I returned to the Creek to hunt for more rocks and feast on salal berries which were plentiful along the trail.

Suddenly, Last Summer...

(Molly Byrne)

...an unexpected opportunity came along for me to go on a plant collecting trip for the Botanical Garden at U.B.C. So, late in July I set out on a journey to collect seeds and seedlings as well as cuttings

from trees and shrubs in the different "biogeoclimatic zones" of British Columbia.

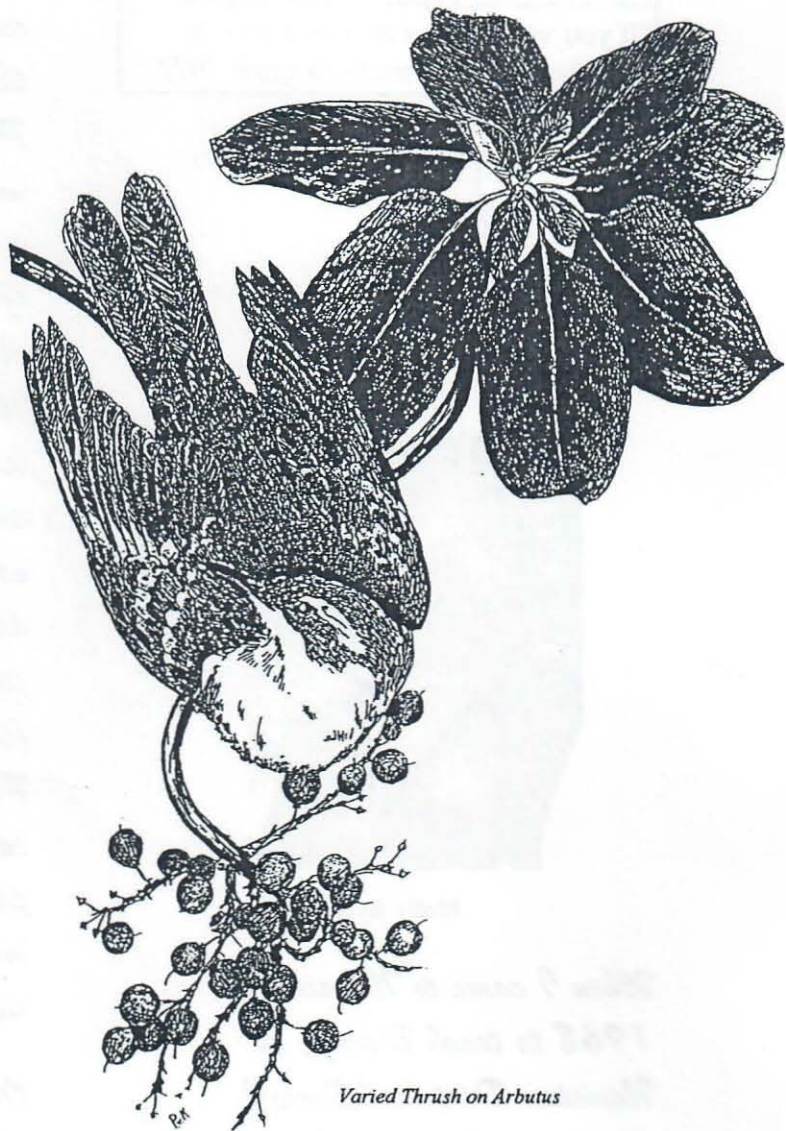
I started working in the "Caribou-Aspen" zone and moved east to the "Interior Douglas Fir" area in the Rocky Mountain Trench. On the return journey, via the southern trans-provincial route, I was able to revisit most of the zones but in slightly different areas. After cuttings were collected they were bundled in a moist sphagnum moss, wrapped in freezer paper and stored in an insulated cooler. For each type of plant there was a label to attach and a form to fill out, so my evenings were busy. Provincial campsites were ideal "offices". I backed my station wagon up to the picnic table, opened up the back door and worked out of it on to the table. Towards the end of August it was always a race between myself and the waning light. Whenever I came within range of an airport I would fill a cardboard box with my bundles of cuttings and airfreight them back to Vancouver. The seeds and seedlings stayed with me and the car got fuller and fuller, while space for me got less and less. We just made it back.

The plant which pleased me most was Silverberry, a shrub that grows by water courses in the dry interior. Its leaves look as if they have been covered with fine white silt, and its berries resemble small silver-frosted green olives.

The place that I liked best was Corbett Lake Country Inn, ten miles above Merritt, in country that looks like the Caribou, but which in reality is in the "Ponderosa-pine-bunchgrass" zone. This is a big log lodge by a small lake in a prairie full of flowers. In winter there is

skating and cross-country skiing. I must go again.

All in all I had a wonderful summer and learned a great deal. Perhaps one day I shall see some of my cuttings, grown up and taking their places in the native garden areas of the new and developing U.B.C. Botanical Garden.



Varied Thrush on Arbutus

1975-1976

On The Salubrious Effects Of Certain Vegetable Life-Forms:

"Flowers in the city are like lipstick on a woman- it just makes you look better to have a little colour" -Lady Bird Johnson.

On The Sad Truth About Trees:

"If you've seen one redwood you've seen them all". - Ronald Reagan, 1972



Molly Byrne

When I came to Nanaimo in 1968 to teach Biology at Nanaimo District (Senior) Secondary School, there was no

naturalist group in Nanaimo. We owe its coming and its continued existence to the arrival of Malaspina College, its professional biologists, their knowledge and their energy. In the early days we were a small, low key group and I remember with great pleasure our executive committee meetings at the home of the Kerridges on Stephenson Point Road. Other pleasant memories include our walks with small groups. I can visualise the Graves family (5 in number) and others working our way around Newcastle Island which was far less frequented in those days. I am lucky enough to own a log cabin on Hornby Island and we had several trips there, particularly to see the Spring flowers on the cliffs of Helliwell Park. Some members slept in the cabin, others camped on the property and the entries in the visitors book form part of a very rich catalogue of people.

Our little magazine, "The Thrush" was the product of much

discussion, particularly in the choice of our symbol. It was the lovely drawing of a Thrush and Arbutus, by Peter Van Kerkoerle which won our votes! What good times we had at the Van Kerkoerles home, particularly after the Christmas Bird Counts. Thank you Peter and Anneke.

*Why did I drop out of the Club?
Why have I never rejoined? I
don't really know! I think it was
because interest in birding became
the main focus of the club and was
not my interest. Now I'm retired
and you know how busy we retirees
become! Maybe I'll be back!
Sincerely, "Molly"*

Wild Flower Workshop (Mary Barraclough)

Early Saturday morning May 10th, 1975 with an eye on the weather, we left for Hornby Island. Mollie Byrne, leader of the group, had invited us to stay at her cabin "The Swinging Owl". There were eleven of us. While it was a small group, it was a nice size to be able to cover the ground, take a few side trips, and all collect inside Mollie's cabin for meals and chats.

Mollie's cabin is a rustic log cabin in a wooded setting with a view of the bay looking towards St. John's point. This was Mollie's first visit of the year and

she was pleased to find that everything was in good shape. We all viewed her new "outhouse" admiring its solid and attractive appearance...both inside and out!

After a quick lunch we hurried off to Helliwell Park to look over the plants, shrubs and wildflowers. This park of over two hundred acres leads from a natural wooded area to the sea, where the coastline rises from sea level to high cliffs. While we were tramping through the wooded area, Bob Graves paddled his canoe to an agreed meeting spot. From there he 'ferried' us over to Flora Island.

We saw Pathfinder, Salicornia (Saltwort or Glasswort), two types of field Chickweed, Chocolate Lily, Larkspur, Shooting Star, Clover, Blue-eyed Mary, Seablush, Dandelion, Evergreen blue Huckleberry, Forget-me-Not, Camas (blue and white), Death Camas, Sanicula, Trillium, Easter Lily, Grove lover (Nemophila, two types), Prickly Pear Cactus (Opuntia), Monkey Flower, Fringe Cup, Saskatoon Berry, Western Crab Apple, Wild Cherry, Ocean Spray and Little Geranium. I haven't listed the variety of other species we found such as the grasses, ferns, mosses and shrubs.

The trip to Flora Island was a first for most of us. Beachcombing was most fruitful: interesting pieces of driftwood and shells (abalone and rock oyster). It began to rain and the tide was rising so we reluctantly left Flora Is. By the time we reached Mollie's cabin, the rain was increasing and it was pleasant to feel the warmth from the wood stove. Supper was delightful, the food tasted so good.

While the rain pelted down outside, after supper we just chatted and played games. The puzzler of the evening was Mollie's "Black Magic game". She and her helper had to tell us the secret as we couldn't solve it.

The next day we had an expedition on Mollie's property to discover how many different plants were growing there. The group found over twenty-six species of plants. Microscopes were set up and we studied the plants under magnification. The complexity and beauty of the colour patterns revealed were amazing. One could see the structures of even the tiniest most minute plants. For me it was a revelation. This was a delightful and most rewarding weekend. Thank you Mollie for extending this invitation and for sharing your cabin and your knowledge. We were all sparked to continue our interest in wild plant life.

☞ On October 26th, 1975, according to the monthly newsletter, a field trip was planned to Bonnell Creek Falls in Nanoose Bay. They were to meet at the Arbutus Park picnic site at noon then follow about 5 miles of rough logging road. For those who didn't want to take that route, however, the area also offered several alternatives which their leader (Barbara Graves) pointed out including mushrooms, which are always good after the rain.

☞ On Saturday Oct 4th, four members of the club were present at the mouth of the Englishman's River in Parksville where about 75 people gathered. They were concerned about saving the area and met with representatives of the regional district

☞ They went on to the Marshall Stevenson Wildlife Sanctuary for the **first ever** Vancouver Island Regional Naturalists meeting.

☞ Sunday, October 5: Saltmarsh, Berries and Mushrooms "It may be a little late for berries, a little dry for fungi, so I [Mollie Byrne] thought we would include a saltmarsh as well, just as insurance. Meet at the Arlington Hotel, Nanoose at noon. This will be a short, easy walk."

☞ Dr. Michael Bigg of the Pacific Biological Station spoke and showed a film on Killer Whales at the January Meeting.

In the "President's Message" in January Mollie noted that: "We go into 1976 with many plans already laid. Neil Dawe, from the Marshall-Stevenson Wildlife Sanctuary in Qualicum, will speak at our February meeting. He has organised the second Regional meeting to take place in Victoria on Feb. 7th. We are sending two delegates to that meeting. On March 6th we are to host the first open meeting of the Vancouver Island Region.

"You may have read in the local press that Malaspina College is to have a Regional Exposition Centre, due to be completed this summer. The major financial contribution will be from the National Museums of Canada, but they will be looking towards clubs like ours to help with the rest of the money. Further news will be forthcoming.

"We are always looking for members to organise and lead field trips. Don't hang back...we'd like to go there! I hope you

will look forward with me to an active and enterprising club in 1976."

The Editor's Notes by Anneke Van Kerkoerle in that same issue contained items about birds, bears and earthquakes!:

- ☞ "When Ken Campbell came back from his fishing trip this Fall, he told us the story of having a remarkable Rufous Hummingbird visit him on his boat some twenty miles west of Calvert Island in the Queen Charlotte Sound!...
- ☞ "Twice this Fall a Yellow Shafted Flicker has been spotted in the Cassidy area.
- ☞ "Also this fall, five or six Short-eared Owls were seen by different bird watchers on the Nanaimo River flats. We also observed three Marsh Hawks in one visit.
- ☞ "Honey is still the best health food ever"....thought Mr. Black Bear...so he turned over some of our beehives and enjoyed a good meal.
- ☞ "Dave Denis watched a Pygmy Owl kill a Pigeon and eat its head off.
- ☞ "On November 30th we had a surprisingly large snowfall, and a more surprising earthquake of 4.5 on the Richter scale. That day, some Duncan bird watchers noticed two Rosy Finches and a flock of Black bellied Plovers at our Piper's Lagoon. On Dec 2nd Gloria Knowles had a Redpoll on her feeding tray and Ken Knowles met a Mockingbird right in town on Dec 16th. On Dec 27th, our Bird Count: 101 species!"

Terms of Venerly

(Contributed by Gloria Knowles)

"Didn't see even a gaggle of Geese, but I did raise a sord of Mallards out of a raft." Double talk? Not at all. According to the National Geographic Society, that's just what an autumn sportsman might be saying if the old and odd words for groups of birds and animals were still in use today. Translated, a "gaggle" is a flock of Geese on the ground; a "sord" of Mallards is a flight, and a "raft" a large group of birds on the water. In an out-of-the-way closet of the English language hides a colourful store of such expressions. Many are archaic and almost forgotten, but each was once the prescribed word for its job.

Elaborate glossaries for hunters and fishermen actually were compiled in bygone centuries. The more lengthy and complicated these "terms of venerly" became, as in Shakespeare's day, the better could gentlemen sportsmen be told from the untutored. Writers today scratch their heads to remember such phrases as "clowder" of cats, and a "kindle" of kittens; a "gang" of elk and a "stud" of mares. Word collectors treasure such prizes as a "pride" of lions, a "sloth" of bears, a "sunder" of wild swine, a "pace" of asses, and a "leap" of leopards. Some animal collectives are apt one-word descriptions: a "shrewdness" of apes, a "labour" of moles, a "skulk" of foxes, or a "barren" of mules. But whence came a "dray" of squirrels, a "rout" of wolves, or a "haras" of horses? [*harses?*]. Birds in a body were denoted by equally strange idioms. There is firm historical ground for speaking of a "dool" of Turtledoves; a

"pack" of Ptarmigan, a "pod" of Coots, and a "spring" of Teal. A "covey" of Quail is now part of our language, but what about a "congregation" of Plover, a "siege" of Herons, a "muster" of Peacocks, and a "walk" of Snipe!"

Outdoor Ramblings

(Angus Johnston)

We [*Gwen and Angus*] like the outdoors, and as a result, we do a lot of hiking. One of our trips this summer took us to Spider Lake [so named because of its many arms] It is a large lake. In fact you have to get out in a boat in the middle to really appreciate its size. With Joe Petershofer and his canoe we wasted no time putting into the waters of Spider Lake, but our object was to locate the larger of the two Illusion Lakes - a matter of only about 50 yards distance from one of the arms. After several attempts, we finally located the right one. We searched the shoreline carefully and noticed a spot where we could land the canoe and saw a faint trail. Once ashore, we climbed the bluff about 100 feet and there below us was the lovely Illusion Lake.

Two years ago last summer we made a trip with the club into Rhododendron Lake, and by doing so, it opened up the Northwest Bay area to us. We have now hiked into all seven of the lakes there: Boomerang, Cottell, Blackjack, OK Lake, Round Lake, Of Lake and that lovely Kidney Lake. On our last visit there we came home via Brannen Lake with a side trip into Green Lake. We have been to all nine of the lakes in the North Oyster and Cedar areas. On our first trip to the south arm of Holden Lake we were surprised to find a railway

right-of-way. This turned out to be the roadbed of the Morden Mine, which is about half a mile east of the Island Highway, roughly opposite South Wellington. We decided to trace this railway from the mine to its end at Boat Harbour. Except for a short stretch over private property, which was fenced off, we traced the railway through the Cedar district, past the Wheatsheaf Hotel, and on to where it crossed the Nanaimo River over an island, and on to Morden Mine. We have been in the Morden Mine area many times. The road takes you to the Nanaimo River and in the spring and early summer there are many Trillium, and White fawn lilies etc.

No doubt many of you have been to McKay Lake, taking the road at Cassidy-Spruston Road. About a mile south of McKay Lake is Crystal Lake. We hiked in from McKay Lake about four years ago, but were disappointed to find that we couldn't get near the water's edge owing to heavy brush. However, since then, the Forestry Service has put in a road from the logging road that we followed from McKay Lake. The road now leads right to the water so that one can launch a boat for fishing. The Forestry Service, by the way, put the road in so that water from the lake would be available in case of a forest fire.

Two miles south of Crystal Lake is Blind Lake. Leave Spruston Road shortly after crossing the Comox logging tracks, making a left turn. The road into Blind Lake isn't too bad, a bit rough here and there. The road of course, carries on to Crystal Lake. Next time you're on your way to Victoria, turn right off the Island Highway shortly after you reach the summit of the Malahat; drive in for one

mile to Spectacle Lake. This is a small lake with a delightful trail encircling it. The real "spectacle" however, is the many wild flowers, particularly Shooting Stars and Lady Slippers. The rocks are covered with these wild flowers.

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In the Spring 1976 issue of the *Thrush* the Editors' revealed the following:

- ☞ "Over the winter our Club outings saw more people taking part. This is undoubtedly due to the great efforts of Ken Knowles and Brian Wilkes who spend so much time advertising our club. The Nanaimo Free Press Friday issues contains our Club column "Tune Into Nature". It is written by Ken Knowles and is avidly read by many nature-minded folks.
- ☞ "In January seventeen naturalists headed for Newcastle Island in four canoes and ate lunch by the shores of Mallard Lake. Later in January an adult Peregrine Falcon was found there. It had been shot on two different occasions: one fresh bullet hole was through the wing. The other, older (by about a week) bullet wound, was in the chest and was festering badly. The bird died two days after it was found.
- ☞ "A walk around Buttertubs Marsh on the 25th. It was still winter but the first Redwing Blackbirds were there.
- ☞ "A count of local flocks of trumpeter swans on Feb 15th netted 41 swans.
- ☞ "On March 6 our Club hosted the Annual FBCN Meeting. It was held in the Nanaimo Library Building.

Thirty-seven people attended, most from the different Vancouver Island clubs. Neil Dawe of the Marshall-Stevenson Wildlife Sanctuary in Qualicum presided.

- ☞ "On March 26th Neil Dawe, who was also the former Manager of the Reifel Bird Sanctuary on the mainland, provided our club with a beautiful slide show and excellent commentary. It made many of us anxious to see the refuge first hand.
- ☞ "Our chance came on April 10 when Ed Barraclough, President of the Kla-How-Ya Travel Club invited our members to join members of that club on a bus trip to the Reifel Bird Sanctuary. Eighteen members of our club went and it was enjoyed by all as both weather and birds behaved very well!
- ☞ "Mollie Byrne has given up the job of being our Club President. She took over from Dave Kerridge when he went to Texas. Her intention was to help out only until a new President could be found. We were fortunate to have a young man like Brian Wilkes step forward to offer his services to the club. Brian is 26 years old, married to a lovely girl named Mary Anne. He is also a very dedicated conservationist with our aims at heart. We welcome him as our new President and extend our sincere appreciation and thanks to Mollie for a job well done!"

1976-1977

To Restate The Painfully Obvious

"If companies like MB didn't cut down trees, our world would look very different." -P.R. from Macmillan Bloedel Ltd..



Brian Wilkes

When I came to the club, Molly Byrne was President, and there were several key movers and shakers, like Peter and Anneke van Kerkoerle, Ken Knowles, Dave Denis, Mary and Ed Barraclough, the Graves and many others. The really active

people were all a joy to be with, and the enthusiasm was infectious. I came from Ontario, where a Christmas Bird Count might have turned up 25 species, but we used to get about a hundred in Nanaimo! The birding and the companionship was always great, and Anneke's coffee was always delicious!

During those days, I felt really proud of the projects we developed under Young Canada Works. I remember one was an assessment of natural areas in Nanaimo, back in the good old days when the Feds had lots of money. The club hired some young people to do surveys in several natural areas, like Planta Park, and others. We made a bit of money for the club at the same time.

We also took positions on a few projects that club members felt could be bad for the environment unless proper safeguards were in place. This was debated within the club at the time, because some members wanted to take public

stands while others did not. One such stand was on the Duke Point development, where the Soereds wanted to develop a port and industrial park. Of course the club's views were simply swept aside along with all the others who expressed similar concerns. Another was the "improvement" to Buttertubs Marsh by Ducks Unlimited. I remember going to the marsh one day after DU had taken over, to find bulldozers roaring around in the wetlands, and the marsh wrens and herons standing around in the parking lot wondering what was happening! I'm sure the marsh has fully recovered by now, but at the time there was much disillusionment among club members when it was realised that DU's agenda was to take a perfectly good marsh and turn it into a monoculture for ducks.

During the years that followed I worked as a biologist in Smithers and Mary Ann taught school until the kids came along, then she was a stay at home mom. In 1991

we moved to Winnipeg where I took up my new duties as Director of Environmental Protection for the Canadian Council of Ministers of the Environment. Here we help develop national environmental policy and action plans for provincial ministers to agree to...and implement co-operatively across the country. Some examples are the national smog management plan; a whole bunch of policy and scientific tools on contaminated sites and water quality; actions on CFCs and atmospheric pollutants; and a host of other national issues.

Mary Ann has taken up clowning and goes by the name 'Marianna Banana'. She is now a well known and much loved clown in Winnipeg, and was voted the best children's entertainer in the city at the competition last year. So, for those members who still remember us, now there are two clowns in the family: one of them gets paid! I look forward to getting a copy of this book. " Sincerely, "Brian"

Outings and other odds and ends during 1976 occurred like this:

- ☞ A very exciting March field trip to "some beautiful falls near Nanoose". It was a morning hike of general interest to all with early spring migrants and wild flowers to see. The outing was led by Bob Graves who said it was a secret spot and a perfect place for a morning cook out. Apparently he did a triple flip with the pancakes!
- ☞ Ken Knowles was writing articles in the Focus section of the Nanaimo Daily Free Press each Friday. The responses to these articles were highly favourable, judging from the number of phone calls and letters they were getting. Also, the [Vancouver Island Regional] Library offered to put up a display on the club's behalf in their display window. The club also had the option of erecting a booth at the April *Outdoors Show*...

"April is a very exciting month for the naturalist," wrote Brian. "A gentle awakening is slowly transforming the outdoors into the familiar summer cornucopia of life. Migrating birds are arriving and our observations of them are a necessity. Summer resident nesting birds are going through courtship displays and are beginning to spawn a new generation. We need observers and nest recorders. Spring flowers are beginning to come up and soon we will all be puzzling over our field guides to determine the identity of the rarer ones. The days are longer and warmer, and its time to get our winter-weary bones into

our hiking boots and enjoy this burgeoning earth."

- ☞ Sunday May 9th was scheduled for a day-long trip to Gordon River and Skutz Falls to see, and photograph, the fabulous wildflowers.

In the September Newsletter, the President said: "Weather-wise it was an odd-ball summer, but some club members managed to get out and around. For example, the Knowles' and Graves' undertook a prodigious trip from Vancouver to Powel River, to Courtenay and back to Nanaimo by bicycle!

"Other interesting things happened this summer in the city and region. One was that the Mount Benson Viewpoint Park idea has been accepted in principle by the Regional Board, but don't look for implementation too soon. The Board is still awaiting Letters Patent for parks jurisdiction".

[Ed. Note: By this time, the Mount Benson Viewpoint Park idea had been around for at least a decade. The plan was to build a proper road up to the area on the lower slopes where tourists in summer could enjoy panoramic views of Nanaimo, the Strait and the mainland, without having to use all terrain vehicles to get there. In winter, the park would have cross-country ski trails, snow mobile trails, and an area for sleigh rides. The Chamber of Commerce was interested in touting Nanaimo as a winter tourist area with snow for at least four months of the year!]

MacMillan Bloedel agreed to donate the land necessary to achieve this plan, and the Ministry of Highways was agreeable to keeping the road plowed in winter provided it did lead to a Park. The unusual problem was that no suitable entity could accept the donation of land. The City of Nanaimo already strapped with providing recreational facilities for the area didn't have the resources or possibly even the authority to

manage property outside its borders. The Board of the Regional District of Nanaimo was considering acceptance of the plan, including a survey and the transfer of the land, provided the necessary Letters Patent for parks jurisdiction could be obtained.]

Brian continued....."The Wildlife Branch [Environment Ministry] began its planned habitat improvements at Buttertubs Marsh. You should go over there and have a look for yourself at what is happening!

"Ken Kennedy completed a vegetation and breeding bird study of the Morrell Sanctuary. Serious studies such as this are important to a Club like ours as it provides worthwhile information of general or specific interest as a background for further studies."

[Ed. Note: Another such professional detailed study was done by Mollie Byrne on the vegetation of the Nanaimo River Estuary.]

"Peter van K. found a dying parasitic jaeger in August, and I saw one at Piper's Lagoon just before labour day weekend. Shorebirds are moving through, as are early fall warblers and creepers. We have noticed scoters in Nanoose Bay already. Do you suppose we're in for a bad winter?"

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- ☞ At the September meeting a call was made for the membership to come up with ideas on how the club could help with the development of A Natural History Museum at Malaspina College. *It was said that the Museum was the perfect repository for knowledge and information on the natural history of the Nanaimo area.* Members

interested in making collections, donating records, building displays etc were asked to contact Dave Kerridge at the College.

- ☞ On October 17th members met at the Brechin Point boat ramp where once again canoes had been supplied for them for their trip to Newcastle Island!

- ☞ The new executive for 1976/77 consisted of: Brian Wilkes - President; Mollie Byrne - Past President; Dave Denis - Vice President; Coral Denis - Treasurer; Ken Knowles - Secretary/ Publicity/ and Editor of the *Thrush*; Dave Richards - Activities Co-ordinator; and Anneke van Kerkoerle - Convenor.

- ☞ On Nov. 5th, Dave Denis and Brian Wilkes appeared as guests on the Fish and Game show on CHUB radio. They found that our Club's objectives and that of the Fish and Game Club were not so very different. Both were interested in conservation in the broadest sense, and in educating others about the value of the natural world.

- ☞ To end 1976, members met at the Kin Hut for a Christmas party...a fire in the fireplace, good food (potluck), eggnog ('or whatever'), a sing-song and generally they gambolled the evening away!

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Christmas Bird Count - 1976

(Peter Van Kerkoerle)

For many of our club members the Christmas Bird Count is one of the very best days of the year. This year in particular it was great. The weather was good and there were plenty of birds. It started with a light frost but warmed up to about 8°C. After two rainy days this was ideal weather. The birds were hungry and very active. The count area was divided up into several sections. Once again our numbers were reinforced by several Duncan naturalists. Their help has always been important to the success of our count.

We were fortunate to have the use of Al Holt's boat which made it possible for us to check the outlying islands. Also this year we had the use of a small plane to reach the farther areas behind Gabriola Island which had not been checked out before. With all this additional help we came up with 102 species and 25,167 individuals. But we missed some of the commoner ones like the California Quail, the White Crowned Sparrow and the Herring Gull!

I have been asked if we can notice from the Counts if the birds are decreasing or increasing. I don't believe we can - not from our small amount of data collected over only a 5-year period. We must also remember that we are dealing with *wintering* bird populations rather than with *nesting* birds. The size of the wintering population is directly related to both the climate and available food source. So, if the fresh water freezes, ducks move away. One area with many ducks last year may be empty this year.

The following are a few species and their **five-year counts**. It is interesting to check out the variables which may have affected their numbers.

Species	1972	1973	1974	1975	1976
Trum.Swan	23	14	28	36	50
Red-t..Hawk	3	2	5	3	10
Pine Siskin	648	603	181	2650	3131
R.Crossbill	-	26	2	40	232
S.Scoter	16	142	283	925	1943

First, the **Trumpeter Swan**. In our counts their numbers have more than doubled within five years. During 1974 and 75 however, other swan counts amounted to over 50. It is likely therefore that some of these birds just happened to be outside our Count Circle during count day.

Our **Surf Scoter** counts show a steady increase, particularly from 1974 onward. That year we used a boat for the first time, and last year even more time was spent on the water. This year we even had the use of a plane which gave us a much larger range so obviously duck numbers are higher due to better coverage.

Pine Siskin and Red Crossbill are quite nomadic and their high numbers are always related to good seed crops. Did you notice there were many cones on cedar, fir and hemlock? With the **Red-tailed Hawk** the weather may have been the controlling factor. Weather

conditions were good for flying this year which increased hawk sightings. I believe that only when we look at the data of *all* counts in North America and add up the numbers can we detect true increases (or decreases) in bird populations. Our club data just by itself is of little value other than to give us an enjoyable day! Thanks again to the Duncan group for their help in making this an outstanding day. Also thank you to Al Holt who once again offered his boat for the cause; and to the Nanaimo Flying Club for the use of its plane. It sure was appreciated.

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By the way, talking about Birds, the following newflash hit the *Thrush* in early spring (77). It was entitled '*Honky Tonky gets Married*': "The van Kerkoerle's proudly announced the recent marriage of their Canada Goose 'Honky Tonky' to the lovely 'Danielle'. The bride wore the traditional black, grey and white and was heard to say the following affectionate words to her new husband: "Honk" "Honk"! "Honk" "Honk"!"

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Vancouver Island Mammals (Don Blood)

Birds are the usual fare for Vancouver Island naturalists, and for good reason. They are numerous and observable and can be readily studied year round with little equipment, other than binoculars. Not so the mammals. But perhaps that makes the mammals all the more intriguing. In Saskatchewan, an annual Christmas mammal count is carried out, along with the Bird Count, and few species are tallied. But here on our Pacific island, such effort would be fruitless due to the dense plant cover and small number of species available for

study. Let's take a look at how small a number and why.

The number and type of mammals which have reached islands, and how they evolved after getting there, is a subject which has fascinated biologists since Darwin's time. Obviously the width of the water gap to be crossed is important, but so is the size of the island, and its glacial history.

Vancouver Island, separated from the mainland by a series of fairly narrow channels in the Discovery Island area (near Campbell River) has only 18 species or types of native land mammals, compared to the B.C. total of over 80. The Queen Charlottes, 34 miles from the nearest mainland, have only eight species. Small islands far at sea usually have no native land mammals, but always some native birds. Island size is also important. Large islands normally have more native mammals than smaller islands the same distance from shore. This is because many islands are just too small to support self-sustaining populations of the wide-ranging larger mammals like elk, wolves, bear and cougar. And, random colonizers are less likely to drift ashore on tiny islands.

Lastly, glacial history plays a role. Tropical islands the same distance from their mainland, as Vancouver Island is from its, normally have a larger list of mammal species. This is because our Island, and others on the B.C. Coast, have emerged from beneath a relatively complete blanket of ice during the past ten thousand years....a very short period in total geological history. Islands in the tropics have had much longer periods to

become colonized, and for the colonizers to evolve into new forms.

Vancouver Island's list of 18 species does not include the marine mammals (whales, seals, sea lions) or bats, which like birds, can turn up just about anywhere, nor any introduced species. It is a short list compared to Britain's 24 plus several others now extinct, and Trinidad's 31; but it is better than the Falkland Island's one species, a fox, now extinct at the hand of man, or Iceland's three species.

Many factors determine *which* species will eventually colonize an island. Good swimmers readily get to nearby islands, thus it is no surprise that black-tailed deer, black bears, wolves, otters, mink, racoons and beaver got to Vancouver Island. But what about our own Vancouver Island marmot - certainly not a swimmer by choice. The ancestors of this animal probably got to the Island across land during an inter-glacial period or toward the end of the last glaciation. At that time so much water was tied up in the huge continental glaciers that sea levels were much lower than now, and many islands were connected, or nearly so, to nearby mainlands. As well, the climate and vegetation were similar to tundra and taiga (subalpine-like) conditions, probably to the liking of our marmots' ancestors. Other arctic-alpine mammals such as the wolverine probably also made their entrance under similar conditions, i.e., across 'land bridges' in the Discovery Island or Strait of Juan de Fuca areas.

Smaller mammals such as mice or shrews commonly reached islands on drifting debris such as comes down mountain

sides during landslides, or as stowaways in Indian canoes. Some of our Island mammals are not exactly abundant.

Only two or three colonies of the marmot, the only mammal to have evolved into a distinct species on Vancouver Island, are known to science. The wolverine (a separate sub-species or variety) appears to be equally rare. The sea otter was of course, wiped out by man, but has been re-introduced. Success of the re-introductions have not been adequately established, but a few sightings have been made. All other mammals on the Island seem to be holding their own, even the wolf, which is on the rare and endangered list.

The Island has also been 'enriched' by the addition of non-native species, including the red fox, muskrat and the fallow deer. But only the muskrat has spread throughout the Island.

Introductions of mammals to islands have generally done more harm than good, so any such proposals must be looked at very carefully. Two such exotic species on Vancouver Island are the ubiquitous house mouse and the Norway rat.

No doubt the rewards of birding on our precious Island will continue to compensate local naturalists who must do without the smell of skunk, chatter of chipmunks, photos of moose, or rabbit stew (wild of course). But with no moles in the garden, gophers on the golf course, coyotes in the henhouse or grizzlies in the camp grounds, can we really complain?"

Vancouver Island Mammals

(Bill Merilees)

Wandering Shrew.....	2 endemic sub-species
Navigator Shrew.....	2 endemic sub-species
V.I. Marmot.....	endemic species
Red Squirrel.....	endemic sub-species
American Beaver.....	same as mainland
Deer Mouse.....	2 endemic sub-species
Townsend's Vole.....	2 endemic sub-species
Wolf.....	endemic sub-species
Black Bear.....	endemic sub-species
Raccoon	endemic sub-species
Marten.....	same as mainland
Short-tailed Weasel.....	endemic sub species
Mink.....	endemic sub-species
Wolverine.....	endemic sub-species
River Otter.....	endemic sub-species
Sea Otter.....	endemic sub-species
Cougar.....	endemic sub species
Elk.....	endemic sub-species
Black -tailed Deer.....	endemic sub-species

Just a Lunch Break

(Peter Van Kerkoerle)

It is twelve o'clock and time to have a bite to eat. Outside the sun is shining so I decide to have my lunch on the back steps of the Harmac Laboratory. In the sun and out of the wind it feels a bit like spring. In the sky, great billowing clouds rise all around, but the sun is brilliant. High up towards the clouds an Eagle soars on straight-held wings. Higher and higher he rises in steady upward circling flight. He is the true master of the sky. My eyes follow him. Is he out to survey his domain or has the early spring sun awakened in him that urge inherent in every living creature to go out and find a mate?

All at once a tiny speck darts out of nowhere and sweeps at the Eagle. The Eagle avoids connection with a neat side twist. Several more "attacks" follow, but

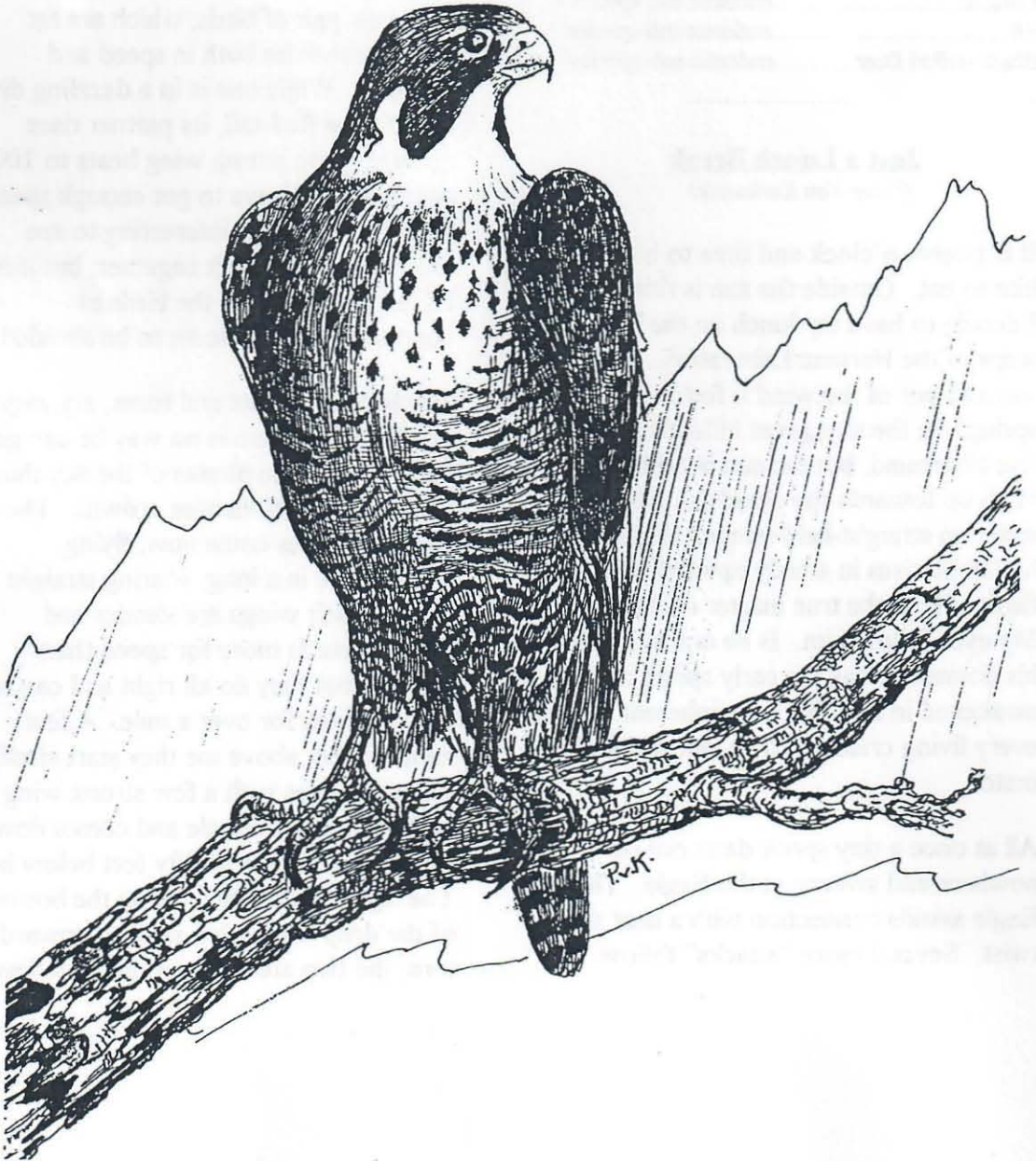
always the Eagle is able to avoid the smaller dare-devil. The Red-tailed Hawk, likely a male, is obviously trying to chase the bigger intruder out of his nesting territory. Then the Eagle heads North and the Red-tail closes its wings and drops with a tremendous almost vertical glide from the sky. This is always a fascinating sight. Nearly always a long drop glide is broken by several fast up-turns, but this time the glide only stops just over the tree tops, where the Hawk spreads its wings and begins to circle.

I continue to watch this bird so far away and within seconds he is in turn buffeted by a new pair of birds, which are far superior than he both in speed and strength. While one is in a dazzling dive toward the Red-tail, its partner rises upwards with strong wing beats to 100 or more feet above to get enough speed for its attack. It is interesting to see these two birds work together; but it is all fun and sport for the birds as connection always seem to be avoided.

The Red-tail twists and turns, zig-zags and flips, but there is no way he can get away from these pirates of the sky than to dive between the tree crowns. The two Peregrines come now, flying towards me in a long, soaring straight flight. Their wings are slender and pointed, made more for speed than soaring; but they do all right as I can see no wing beat for over a mile. A few hundred feet above me they start circling. The male rises with a few strong wing beats above the female and comes down in a powerful dive to fifty feet below her. The legs are stretched out at the bottom of the drop and with a smooth upward turn, the two are back on the same level.

This is the display flight of the Peregrines and may indicate they were within their nesting territory

It is never tiring to watch the play of birds. For me it is one of the most fascinating things of Spring. I am still following their acrobatics when their flight takes them behind the buildings. I finish my lunch. It is time to go back to work.



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The Myth of the Non-Consumptive User

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The concept that some outdoor recreational activities are non-consumptive of the resource base is examined and rejected. Typical non-consumptive activities are seen to be consumptive along spatial, temporal, and physical dimensions. The wide acceptance of this erroneous concept has led to inappropriate behaviors on the part of Naturalist Club and Federation members. Serious errors in park and natural area planning and management have been made. Rejection of the concept frees us to formulate new guidelines and planning tools for parks and similar reserves. User restrictions, a proposed theory of non-use planning, and a new justification for landscape preservation are discussed within this context.

Key Words: non-consumptive user, recreation, resource base, parks, natural areas, landscape preservation.

Each year, hundreds of thousands of people participate in various outdoor recreational activities, but neither hunt nor fish, and are generally referred to as "non-consumptive" users. The purpose of this article is to cast serious doubt on the validity of this term. The perspective presented here is a policy statement adopted in principle by the Vancouver Island Region of the Federation of British Columbia Naturalists. The article was written at the suggestion of Neil Dawe, the past Regional Vice-President, and was subsequently reviewed and edited by a committee of executive officers.

In this article, consumption is discussed only in terms of outdoor recreation usually found in natural areas, parks, reserves, or conservation areas, and in unprotected semi-wilderness. Consumption in terms of what it takes to maintain the essentials of human life, such as food, water, or oxygen is not considered. The points presented here have important implications for naturalist clubs and conservation groups across Canada. It is not new to question the idea of the non-consumptive user, but there seems to have been no national discussion on the issue. Hopefully, this article will generate one.

It is easy to understand why recreational hunting and fishing are considered consumptive. Living organisms are physically removed from the scene, and consequences are apparent when populations of game decline. These resources are supposedly renewable, and can be manipulated by some sort of conventional management. Certain conservation groups, or individuals in them, often rail against consumptive forms of recreation. Naturalist groups typically cast themselves in this light. Other groups recognize and accept the consumptive nature of their activity, arguing that they merely crop off some sort of "harvestable surplus." Rod and gun clubs, rifle associations and other groups are in this category. No matter what one's particular attitude is toward hunting and fishing, there is general agreement that these are consumptive activities. They are closely regulated in terms of bag limits or in the number of licensed participants. These controls derive from the recognition of the consumptive nature of the activity, and are consistent with conventional management techniques.

By contrast, hiking or back-packing, sight-seeing, general tourism and camping in parks,

nature study, nature photography, and picnicking are clearly regarded as *non-consumptive* of the resource base. These particular activities, and all the others in this category, do not seem to remove living organisms from the scene. They are regarded as healthful pursuits that are benign in terms of the surrounding landscape. Participants in these activities are regarded as non-consumptive users of outdoor recreation resources, and consequently there are few controls governing their numbers or behavior.

The non-consumptive user can be categorized in a number of different ways according to the frequency and duration of participation in conventional non-consumptive activities. Naturalist clubs and hiking clubs which organize a specific roster of regular outings are one such category; others include the cubs, scouts, and girl guides, summer camps, wilderness users, recreation vehicle enthusiasts, etc. By far the largest category consists of all the people who camp in or otherwise visit national, provincial, or regional parks, or who, in British Columbia and other provinces, travel on logging roads and camp along the way.

It is difficult to say precisely what the size of this group is. No one can possibly guess the total number of people who visit unorganized facilities, or who seek out other sorts of crown wildland for purposes of recreation. The point is that non-consumptive users are present in far greater numbers than consumptive users. For example, in 1975, the number of hunters and anglers in British Columbia was about 512 000. No figures are available on the numbers of hunter or angler days for that year, but they could not possibly approach the 8.7 million day and overnight visits to provincial parks in British Columbia for the same year.¹ In addition, the British Columbia Forest Service provides unsupervised camping facilities throughout the province, and cannot estimate the number of people who use them. Both Crown Zellerbach and MacMillan Bloedel provide limited facilities in their timber limits, but lost count of the number of users when access to major logging

roads opened on a twenty-four hour basis a few years ago. They do estimate, however, the yearly visitation to be in the tens of thousands.

These are estimates for British Columbia alone, with a population of 2.5 million. We would surmise that the total number of "non-consumers" ranging across the landscape of all provinces and territories is staggering — far greater than park visitor statistics and participation rate data from surveys suggest. Entire industries and retail empires have been created to cater to the needs of back-packers and canoe trippers alone. The "non-consumers" are using more sophisticated and mechanized equipment every year. It is now necessary for naturalist and conservation groups to recognize that non-consumptive users are no longer a few groups of nature buffs or boy scouts hiking into the hills. They are present in this country in enormous numbers. They have become big business, and a big problem.

Is the notion of non-consumptive use valid? The very idea of it does not seem to square well with recognition that some recreational landscapes become seriously degraded over a period of time. But strangely enough, the idea has become firmly imbedded in the rhetoric of the conservation movement. Most conservation officers and professional biologists use the term to refer to groups of non-hunters and non-anglers. Even our own Federation referred to its members as non-consumptive users in a recent brief on the Fish and Wildlife Branch to the Minister of Conservation and Recreation. Perhaps it is time that we, as naturalists, escaped from this comfortable illusion.

The concept of the non-consumptive user of outdoor recreation resources is false. It is an outdated concept that appears bankrupt of accuracy. Much like the now discredited notion of multiple use, the concept may have been useful once, but now in the face of the information available, it must be discarded. In fact, because the notion of the non-consumptive user has been so widely accepted, many serious errors have been made in land-use planning and in the philosophy of the conservation movement. Here is a case in which a comfortable myth has been applied as a principle of land use, and as a result some of the major objectives of the conservation movement are in jeopardy.

¹Figures for hunters and anglers provided by G. Reid, British Columbia Fish and Wildlife Branch, Nanaimo. Figures on park use supplied by Mick Collins, Research Section, British Columbia Parks Branch.

Natural history clubs and federations have a major voice in the effective criticism of industrial, institutional, and private resource consumption issues. Until now, members of these organizations could lob their criticism from the safe fortress of the notion that their own activities were non-consumptive. But if non-consumption is a myth, then we can be held up to ridicule by our opponents.²

If so-called non-consumptive activities are not so benign, then we had better acknowledge this and get down to the serious business of re-assessing our priorities. One of the major objectives of the conservation movement, and one behind which naturalists stand firmly, is the preservation of natural landscapes and habitats. We have focused on gaining legislative protection for them without very seriously addressing the question of what happens to them next. We have not only supported the preservation of these lands, we have also been guilty of encouraging their "non-consumptive" use by our own members and the general public. In fact, the chief argument used in support of natural area preservation, except ecological reserves, is the benefit that supposedly accrues to the public in terms of recreation. This argument will have to be abandoned, particularly if clubs and federations address the contradiction of supporting both the *preservation* and *use* of natural landscapes.

Non-consumptive users do consume recreation resources along spatial, visual, and physical dimensions. They trample and re-arrange vegetation patterns, disturb wildlife, and are the chief distributors of refuse across the land. Let us discuss these and then consider some important implications of the position taken.

²The Village Lake Louise conflict is a good example. That was one of the major conservation victories in Canada. The environmental grounds against the proposed ski resort development were framed in terms of lost scenic and ecological amenities to non-consumptive users. The fact that it was in a national park only gave weight to our arguments. But if the project proponents, Imperial Oil et al., could have identified the long-term damage by tourists and scenery gawkers to the amenities of the site, and shown that this damage would be almost guaranteed by the management philosophy of Parks Canada, then the outcome of the conflict may have been very different. See *Nature Canada* 1(11): 35 and 1(2): 33, 1972.

Spatial consumption simply means recreation consumes space. Picture a natural landscape. In order for it to be of any conventional recreational use, arrangements must be made for access to it and probably for accommodation in it. This results in the direct physical consumption of habitat in the area. A small park might serve as an illustration of this. Ivy Green Provincial Park, south of Nanaimo on Vancouver Island, is sixty-two acres in size and is bisected by the Island Highway. The park is classified as Class A or dedicated to the preservation of the natural environment (*per* the Park Act for the Province). Ivy Green contains forty-eight campsites, each about 108 m² (1200 ft²), thirty toilets and associated facilities located on pads cleared in the forest, a trailer sani-station, a paved parking lot for 104 cars, 3.5 km (2.2 mi) of roads with about 7.5-m (25-ft) clearances, and a large service yard (from the British Columbia Parks Data Handbook). All these facilities are installed for the non-consumptive user, and the process of installing them has left only about a quarter of the park unimpaired — and this is squeezed in between the campsites.

The act of providing for the accommodation of non-consumptive users has succeeded in directly consuming three-quarters of the habitat in a park which has statutory protection from impairment. In this example, the visitors do not directly remove organisms or entire habitats from the scene. The government does it for them, with our blessings. How many small parks can you think of in similar circumstances?

The problem of spatial consumption also extends to mechanized recreational vehicles. Trail bikers, waterskiers, and snowmobilers require much more space than do hikers or canoeists. Mechanized and non-mechanized pursuits rarely mix well on the same landscape at the same time because of conflicts between users. Therefore, most areas are needed to accommodate all the participants of all the various activities, and when more space is needed, it means that what was formerly available has been used up. Conflicting activities might be regulated in the same space by requiring that each occur at different times of the day or week. But this turns into a problem of regulations and controls, which appear to be unacceptable to those recreating under the

illusion that their own activity is not consumptive at all.

Visual consumption means that large numbers of people consume solitude. Recreation research has confirmed that human crowding in outdoor recreation settings results in decreased satisfaction with the experience in the mind of each visitor (Lucas 1964; Stone and Taves 1956). Crowds in any particular area can build to the point where the scenic amenities of the site are completely lost by the presence of too many people. The visual and auditory impact of crowding results in a general feeling of dissatisfaction with the setting, and is often referred to as perceptual carrying capacity (Bouchard 1973; Lime and Stankey 1971). The problem is that large numbers of people (or even small numbers, depending on your degree of "purism") make solitude scarce. Since the necessary precondition of scarcity is consumption, we can conclude that visual resources have been consumed when the scenic amenities of a site are lost. If solitude becomes scarce enough to engender a feeling of over-crowding amongst people at a particular site, perceived or "expected" space has been all used up. As often as not, it is solitude that people seek when they visit natural landscapes. Here is a case in which larger numbers consume the very quality sought.

Another aspect of visual consumption is the visual impact humans have on wildlife. There are a number of wildlife species that seem to require privacy from human intrusion in order to thrive in their respective ecosystems. In these cases the presence of people may not be directly consumptive, but in the long run the result is the same. These organisms do not have somewhere else to go when they are pushed out by human presence. They are where they are because that is where they must be. The alternative for them is simply to disappear.

Beyond requirements for access and accommodation on recreational landscapes lies the problem of direct physical impact. This was first identified as a problem as early as 1929 (Bates 1935; Meinecke 1929). Subsequent studies have shown that in certain environments, such as forested areas with a well developed ground cover, very severe impacts occur with the lightest use, and that physical impact is cumulative over a period of time (Frissell and Duncan 1965; La

Page 1967). Cumulative impact simply means that the year-to-year effect of human presence in natural recreation settings continues to build gradually until serious changes become apparent. Even light and occasional use of an area for hiking or nature study can have its effect in time. The amount of effect is also dependent on the particular sensitivity of the specific site.

The direct crushing of vegetation by trampling is one factor that favors the replacement of natural vegetation by non-native basal rosette-type plants such as plantain or hawkweed. Soil compaction caused by human treading retards the growth of trees, perhaps killing them. Forest duff can be pulverized, the soil denuded, the ground can become puddled and down-slope erosion can occur. The long-term effects of these impacts are visibly and seriously to alter the original vegetation patterns and associations in a manner that normal plant succession would not. Natural vegetation patterns contribute to the characterization of the unique or valued aspects of the particular site in the first place. Furthermore, wildlife that requires special vegetational habitats will be affected. Campgrounds in some parks, for example, contain populations of Common Grackles, Brown-headed Cowbirds, and even House Sparrows. These are species not normally found in any numbers in the surrounding natural habitat.

The non-consumptive user is guilty of these impacts. Point Pelee National Park in Ontario has been hammered by birdwatchers. The impact of camping has been so great there that it is no longer allowed. Restrictions are now being placed on the number of people entering some of our large semi-wilderness parks to keep down the collective damage (and to protect the visitors' experience). North of Tofino, on the west coast of Vancouver Island, there are hot springs in Maquinna Provincial Park that are waded and bathed in by organized groups from hiking clubs. These rare hot springs are now ruined and valueless as an ecological reserve. Members of naturalist clubs are often the worst offenders in unique or highly sensitive habitats. These are areas we actively seek because of their high interest value. But we tramp around in bogs, marshes, alpine meadows, and gull colonies, content in our non-consumptive status. Increasing numbers of natural food buffs are

systematically harvesting edible wild nature. This problem is especially relevant in parks and similar reserves where the hunting or "harvesting" of other wild things is forbidden, but where groups like Outward Bound teach live-off-the-land survival skills.

The accumulation of garbage and litter in remote places is a very serious problem. Tons and tons of it are hauled out of our remote and accessible recreation areas every year (53 tons from the interior canoe routes of Algonquin Park, Ontario, in 1972 (Toronto Globe and Mail, 8 June 1974)). Imagine the garbage that piles up in the well known and easily reached areas. Garbage is not only unsightly, its presence can alter natural behavior patterns in some species of wildlife. We all know about bears and garbage, yet how can littering activity that leads to the destruction of "problem" bears be called non-consumptive?

Not only is it necessary to remove portions of the original countryside initially to accommodate the non-consumers, but the impact that these users have on the remainder continues year after year to erode the landscape more. The massive numbers of such users, doing their collective "thing" on our natural landscapes, makes them (i.e., us!) the *most* consumptive and the *most* destructive of all groups of recreationists. So we are faced with an interesting irony: the "non-consumers" are shown to be the most serious consumers, simply by virtue of their numbers, by what they do, and where they do it.

We must accept that the notion of non-consumptive use is a myth. There is simply no such thing as a non-consumptive user. After all, land *use* has implicit in it the idea of consumption. The idea of land use probably derives from the bizarre human misperception that all of non-human nature is merely a storehouse of resources. To say "non-consumptive use" is actually to speak a contradiction. The net result of all so-called non-consumptive recreational activity is the creation of a real scarcity of unimpaired environments. The increasing scarcity of unimpaired environments is proof of the gradual consumptive nature of our activities.

Some may find it difficult to accept the position we have taken. After all, the idea of the non-consumptive user is firmly entrenched in

our vocabularies. He has been the celebrated mythical beast that we have often used to justify landscape preservation. Under the myth we have self-righteously pointed accusing fingers at other resource consumers. We can no longer hold that somehow we are better than they are simply because we think we are non-consumptive. With a new perspective we can approach old problems with a fresh and perhaps more fruitful outlook. Let us explore some possibilities.

At least three implications come to mind if we are to reject the idea of non-consumptive uses. We must construct strict rules guiding our behavior when visiting natural landscapes. We must adopt a new attitude and approach to land-use planning as it applies to recreational landscapes. These ideas are to some extent inter-related.

Naturalist clubs must pay special attention to rules, or standards of conduct, in the outdoors. They often travel *en masse* to the most sensitive areas in their vicinity. We would recommend then that clubs make an effort to travel to special spots only very occasionally and when they do, they should travel in small groups. Choose places to go at a time of year when you'll do the least damage, and then stay on established pathways in small groups. Identify plants where they are, without picking bits off to check at home. We know a few "naturalists" who crash around looking for bird nests, and photographers who tear away the foliage for the proper camera angle. We do not say that nest records are unimportant, only that conscience often isn't part of the equipment of the recorder. Each club should recognize for itself what measures are necessary to ensure the least consumption on the part of its members.

Controls on behavior extend from the voluntary actions of clubs to the mandatory restrictions of government agencies. Nobody wants willingly to give up more liberties in a world in which they are rapidly eroding in all aspects, but it is time that naturalists begin a co-ordinated effort to get behavioral restrictions instituted, at least in our large semi-wilderness parks.

Strict visitor controls appropriate in large parks include party size limits, the use of burnable containers only, and the use of stoves rather than fires where natural wood is at a

premium. The ideal situation would entail licensing all back-country users and regulating their numbers through a permit system. The licensing procedure has a double benefit. It allows agencies to know how many users there are, and it could mean a skills test prior to licensing. A skills test is very important because ignorant and unskilled people are using natural landscapes more and more, and they do the most damage.

The prospect of licenses and permits for so-called "non-consumptive" users may make people recoil in horror. It conjures up the image of an enlarged bureaucracy to deal with it, as well as the spectre of more lost liberties. Back in the 1950s and 1960s, outdoor recreation of all sorts, but particularly in parks and equivalent reserves, was held to be a right, and available free to anyone. This idea has never been seriously challenged until now. The recreation we have been discussing is not a right any more; it is a privilege. We no longer live in the world of the 1960s. Solitude and wild nature are scarce. We would rather see the price for the privilege of using it paid in personal liberty than in the erosion of the unique character of the landscapes left to us. Strict controls will be made a widespread necessity anyway, when area by area, overuse becomes a crisis. If we have the vision to see that controls are necessary now, why don't we have the courage and freedom to implement them?

We have said something of the need for a new justification for landscape preservation. Total conservation is a four-part concern. Wisely managed use is just one part. Others are of equal weight and importance. They are preservation, restoration, and protection. Preservation figures importantly in overall conservation, and yet the rationale for the preservation of landscape is almost always that recreational benefits accrue to the using public. We have gone so far as to equate parks with "preserved" land, when nothing is further from the truth. If we reject the idea of the non-consumptive user, and yet recognize the importance of landscape preservation, we can hardly endorse parks as the appropriate vehicle for preservation, because parks are justified and developed for their recreational potential.

This does not mean we should reject the idea of

parks, but rather encourage governments to become serious about their stated purpose of preserving unimpaired landscapes. Neither should we reject the idea of people in parks, because there are regulatory mechanisms available to limit resource consumption by tourists and others. But we must dismiss the idea that landscapes, and the communities of life on them, can only be preserved in parks, and that the rationale of preservation is recreation. Ecological reserves and nature conservancies are a step in this direction, but so far they have succeeded in setting aside only limited areas. It simply will not do any longer to justify parks, reserves and sanctuaries in terms of the benefits to be derived for the "non-consuming" public. This form at once categorizes these landscapes as "resources" anyway, and makes their eventual exploitation for recreation an imperative.

It is sad to think that any justification is necessary at all for landscape preservation. But if it is, then we should hold that natural landscapes should exist for their own sake: that their internal dynamics are fundamental engines of nature, fueled by the sun, and nurtured by the earth. We should hold that landscapes and their internal dynamics should be preserved solely because they are there, for their own sake, and because they have the right to exist (see Stone 1974 for a discussion of the notion of legal rights for non-human nature). We must not only reject the idea that nature exists solely for human benefit, we must also develop new planning tools that are not based on human utility.

Government land agency planning proceeds along conventional lines, and clubs and federations expend considerable effort criticizing the results. We can call it "systems," or "master," or "site" planning; but what these terms really mean is the planning of how to accommodate people on the landscape. In natural areas conventional planning merely orchestrates the systematic reversal of the principles of preservation. If we recognize the consumptive nature of all recreational land uses, and are really concerned about landscape preservation, then we should reject conventional land-use planning in favor of *non-use* planning.

A new theory of non-use planning can be generated from a thorough understanding of the nature of resource consumption by recreation-

ists. It would involve the identification of physical carrying capacities on natural landscapes through detailed inventories and sampling. It would center around strict controls on the numbers and behavior of participants in supposedly non-consumptive pursuits. It would place preservation as the top priority instead of use. Finally, it would emphasize that non-human nature exists for its own sake, and that the accommodation of people in it is not a matter of compromise but rather one of integration.

In this article, a critical evaluation of the notion of non-consumptive use was made and found to be false. Some of the implications of rejecting the notion were also explored. It remains to decide what to do next. The acceptance and implementation of the various issues raised here could mark a new era for conservation in Canada. We have a choice: either we take cognizance of the future of natural landscapes and organize ourselves to meet it now, or we languish, comfortable in the hope that somebody will do something when the crisis comes. For us, the price of waiting is too high.

Acknowledgments

Helpful comments and suggestions were gratefully received from Ron Seaborn, Betty McKinnon, Bristol Foster, Yorke Edwards, Mary Ann Wilkes, and Karen Dawe. Special credit is due to Mollie Byrne, Dave Denis, Al Hawryzki, and Neil Dawe for serving on the editorial com-

mittee. The inputs received from the member clubs of the Vancouver Island Region are also gratefully acknowledged.

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1977-1978

On Annihilation

"Nature resolves everything into its component elements, but annihilates nothing."
-Lucretius 57 BC.

On The Question Of Improving The View

"We agree clearcutting appears unsightly but properly planned and executed it creates pleasing and diverse landscapes."
- P.R. from Canadian Forest Products Ltd.



Dave Richards

While I was born in Toronto, my folks were farmers, and I spent much of my youth on our farm

near Kingston, Ontario. It was built on limestone and the area beneath was riddled with small passages and an underground stream system which could be accessed (and explored) through a nearby cave. Heaven to a boy interested in such things as caddis flies and small snails.

I graduated from the University of Saskatoon (biology major) and later worked for the Fisheries Branch of the Saskatchewan Dept. of Natural Resources. Eventually we moved to Prince George where I was a member of the Pr. George Naturalist Club for about 4 years. When we moved here, in the mid 70s, I naturally sought out the Nanaimo Field Naturalists.

The Club was very involved at the time with the "hot" issue of the Duke Point/Jack Point controversy. There were many other concerned groups allied with us, including the Fish and Game Club, the Concerned Citizens of Nanaimo Committee, the UFAW

as well as the Nanaimo native band etc.

There was so much pressure to go ahead with the Port development plans from various other groups and influential individuals - including the Mayor, Frank Ney who felt that it would help fire up Nanaimo's economy; we did not, therefore, really expect to stop the development. But we did get changes made to the plan and many of the outlandish ideas by Duke Point proponents were shelved as a result of our strong presence. It was sad to see any changes made to Jack and Duke Points. I remember it as an area rich in wildlife, and easily accessible to families and their youngsters interested in Nanaimo's natural heritage.

Sincerely, "Dave"

In the November 1977 issue of the Club's newsletter, the new President, Dave Richards, thanked the outgoing president: "I wish to pay tribute for the tremendous job of president done by Brian Wilkes.

Most members only saw Brian when he was chairing meetings or while they were on club outings. Little did they realise that he put hundreds of hours of work on such things as Duke/Jack Point port proposal; Buttertubs Marsh; and on the summer works projects [Young Canada Works] which he ran on a daily basis. Furthermore, Brian's many contacts netted us a number of outstanding guest speakers. We are fortunate that the Wilkes' will be staying in Nanaimo for a while and Brian has agreed to remain on our Advisory Group for the [YCW] grant we now have. Brian is also the Club's representative on the Estuary Protection Association which is "hammering" away at Environment Canada to enforce the laws protecting estuaries, including the phasing out of log booming."

Just how "hot" was this issue about Duke and Jack Points in the mid-70s? Well, at the time it was reported as a Jekyll and Hyde drama. On the one hand, the proposed \$100 million harbour development was billed as a bonanza for Nanaimo and the answer to its unemployment rate conservatively estimated at the time to be 14 % for the general work force, and as high as 30 % in the construction trades.

But the development, which was to include a deep-sea shipping terminal, an 80-acre industrial park, a bulk oil-storage tank farm on Duke Point, and two sawmills on Jack Point, had its dark side.

While city and provincial officials were saying that the development was crucial to re-establishing Nanaimo as an important deep-sea port for the handling

of forest products, (thus saving the city from an almost certain economic death), federal fisheries officials and scientists, the B.C. Wildlife Federation, the Nanaimo Fish and Game Club, local fishermen and naturalists were convinced that the Jack Point sawmills were the Mr. Hyde of the harbour development. The sawmills would destroy a valuable greenbelt and potential park site while adding to the mass of log booms already then choking the biologically rich estuary. Scientific evidence by that time linked log booms to depletion of the salmon resource and had federal fisheries and members of the United Fishermen and Allied Workers as well as the Pacific Trollers' Association angry. Ottawa conceded that salmon yield in 1977-78 was less than half what it had been 10 and 15 years earlier due almost entirely to log booming.

Scientists from the Pacific Biological Station in Nanaimo had this to say about the effects of log booming: "There are several indicators of the degradation of the aquatic environment affecting salmon abundance, yield and size. For example,

- ☞ young chum salmon, which habitually used to come down the Nanaimo River soon after hatching to spend considerable time in the biologically rich estuary, are now moving on quickly, a sign that food supplies are dwindling;
- ☞ a species of worm commonly found in poor aquatic environments is proliferating in the log booming area of the Estuary; and a small shrimp-like organism which is a major source of food for young

salmon has virtually vanished from the Nanaimo River Estuary;

- ☞ large populations of Chinook salmon are showing decreased growth rates, a sign that the fish populations are eating all available food resources;
- ☞ the most extensive use of the Estuary by fish is on the east side. The western half of the river mouth is almost completely obscured by log booms; eelgrass beds, crucial to both salmon and waterfowl, are declining in size and extent due in large part to log booming operations."

The B.C. Development Corporation took over management of the development from the Nanaimo Harbour Commission but it (BCDC), perhaps unintentionally, appeared to be more on the side of the developers which added fuel to an already angry controversy. Finally the federal fisheries department flatly opposed any further log booming in the Estuary and as licenses came up for renewal, they were cancelled.

One spokesman for the Fish and Game Club said: "Saving estuaries from log booms is only the beginning to fully using the biological diversity of a river's resources. The federal government has proposed a \$400 million salmon enhancement program, but it seems ludicrous to spend money in one direction without removing the causes of depletion first. We could be farming salmon and increasing our yield instead of permitting irresponsible use by forest companies. Estuaries are the richest little places on earth and the Nanaimo is one of only three major estuaries on the West

Coast....let's not forget that."

.....

A few other things happened in 1977/78 besides the Duke/Jack Points issue. For instance, in November 1977, the Club voted to change its name from *The Nanaimo District Naturalists* to **The Nanaimo Field Naturalists.....**

apparently the latter sounded less like a nudist colony than the former name did.

☞ An interesting club outing took place on January 29th, 1978 ..when 36 of its members went on a wiener roast and hike to Qualicum Falls. The Falls were roaring! and the wiener roast took place in "the shelter" under the trees. This became an annual fall event, until the mid-1980s.

☞ On Feb 12th members took a short, relaxed hike through the winter woods to Blind Lake. And two weeks later, they went to Newcastle Is. for a hike and pot luck lunch. It was noted that "last year's hike was a navigational disaster so bring your compass".!!! [One wonders if they got lost in their canoes looking for Newcastle Island! See entry on page 23]

☞ In April, an Owl-calling session was planned at Peter and Anneke's. Dave Richards wrote, "Last year's outing was a great success. If you haven't been on one of these Owl-calling sessions you must come. It has to be seen [heard?] to be believed! If the night is clear, I'll set up a couple of telescopes so that we can also check out the heavens."

☞ The Club received a letter in May of 1978 written by two concerned citizens living on Stephenson Point

Road. They asked if the Club would spearhead a proposal to have about 30 acres of land (situated between Stamp Way and the now Lifestyles Complex and Planta Park) protected as a wildlife habitat. If the Club answered that letter or tried to do anything about it we don't know. It probably was a lost cause, overshadowed by the raging Duke/Jack Points issue at the time. Twelve years later that 30 acres of 'camas paddock' disappeared. The terrain was denuded and replaced by very pricey human habitat.

☞ In September 1978, to get away from it all, the Club went on its Annual hike to the top of Green Mountain in search of *Marmota vancouverensis*.

☞ Earlier in the year, Mollie Byrne had adopted a drake Mallard in the name of the Nanaimo Field Naturalists while she was visiting the Wildfowl Trust at Slimbridge, England.

Club Secretary and Editor of the *Thrush* (Kim Goldberg) wrote: "This last year has been an interesting and productive one. As a club we can be proud of the work done by our "grant" [Canada Youth Works] people, headed by Donna Bohoslowich. Their efforts produced an increased awareness - and appreciation - of our local surroundings by school children and community members who were exposed to the program. During the summer a series of nature walks and evening presentations were conducted. The grant itself is over, but left behind a valuable resource for the community. A set of nine different slide shows were created, each dealing with some aspect of natural history and deposited at the

Resource Centre. They will be used by our area's public schools in the future."

The following recipes were submitted to the *Thrush* by the Club Treasurer, Coral Denis:

Finch Fries

Raw beef suet

1 C. millet

1/2 C bread crumbs

1/2 C. cubed cheese

Combine the millet, bread crumbs and cheese and spoon mixture into four empty small tuna or cat food tins. Put the beef suet through a meat grinder and melt down in a double boiler (do not fry). Set aside to cool slightly. While still in liquid form, pour enough to fill tins. Refrigerate to harden. Nail to trees with six inch nails. Be sure to tape exposed end of nail to ensure a safe perch.

Chickadee Chewys

Raw Beef Suet

Sunflower seeds

Pine cones

Millet seed

Attach string to pine cones and spoon melted suet over them until well coated. Sprinkle with millet. Push sunflower seeds under scales. Spoon more warm suet over the cones, building up suet and securing sunflower seeds. Let harden and hang from tree branches.

Before we leave 1978, mention should be made of another controversy which started heating up again. It was the issue of extending the 5-year moratorium on

the **Schoen-Tsitika** region of North eastern Vancouver Island. In 1973 there had been a 5-year moratorium placed to protect it from the forest industry. **The Tsitika** (84,000 acres) was considered unique in that it was the only remaining untouched watershed on the entire East coast of the Island. Thus the valley had great scientific value as a sample ecosystem and it was proposed for protection under the Ecological Reserves System. It was written that:

"The Tsitika River valley is a strip of land little more than 15 miles across at its widest point. It is situated about 50 miles north of Campbell River. The river channel is 24 miles long and empties into an undisturbed estuary in the Johnstone Strait, midway between the communities of Kelsey Bay and Port McNeil."

The **Schoen** region (approx. 138,000 acres) was a candidate for provincial park status. The Parks Branch had recognized its value back in 1960 but its proposal to make the area into a recreational reserve was quashed by the forest industry. It was described this way: "Structurally, **the Schoen** is composed of high, rugged ridges, interspersed with steep-walled, flat-bottomed valleys. Alpine vegetation and snow-fields cover the mountain tops. Valley floors are typically carpeted in grass meadows. Vertical contrast is great, with peaks rising straight up from level valley bottoms to about 2000 meters. The scenery, typified by extensive cliffs and high waterfalls, is spectacular."

In 1973 it was argued that "commercial forest values were marginal. Trees on the valley floors grow in clumps, not continuous stands. Species composition is primarily Western Hemlock with Amabilis and Grand Fir (balsams). Little, if any, Douglas Fir is to be observed. The alpine offers no commercial timber. In between the low and high zones, slopes are very steep - too steep to allow logging without irreparable damage to the soil, caused by yarding of trees and construction of roads. The forest company would not be able to harvest timber on a sustained yield basis; they must 'mine' it or leave it."

"If logging was allowed in the Schoen, the forest company would presumably only be interested in removing the patches of timber that existed in the meadows on the level valley bottom. There is little need to suggest what this will do to those meadows. The valley trees are important to the wildlife of the region. Intercepting much of the falling snow, these groves provide winter refuge and range for the resident Roosevelt Elk and Black-Tailed Deer."

The Tsitika, an enclosed system, was the only remaining unaltered habitat of the Roosevelt Elk. This animal, listed internationally as an endangered species, was rapidly declining in number on the Island. Ostensibly, this drastic population reduction was linked to the fact that the animal's habitat, especially winter and spring range areas, were destroyed as a result of forestry operations. Tsitika offered the only possibility for retaining a completely untouched habitat unit for the Roosevelt Elk, thus ensuring that the species would

not eventually be lost from Vancouver Island and Canada.

In late 1977 the provincial government announced the creation of two parks in the Tsitika comprising 29,000 acres. The remaining area was to be turned over for logging once the forest companies had submitted their finalized plans for government approval. The moratorium therefore, was to remain in place only until these plans were approved, despite pleas for restraint by such groups as the Nanaimo Field Naturalists, other Island naturalist clubs and the Federation of B.C. Naturalists (Vancouver Island Region) which was actively involved in the public hearings in several towns on the Island.

In its position paper the FBCN said: "The Tsitika Valley is unique in two ways: it is the last unlogged watershed of such size on the East coast of Vancouver Island and has remained essentially unburned for so long a period that a forest of Amabilis Fir - Hemlock - Cedar composition is now general in the valley; a truly unusual feature in this region. Thus the opportunity to establish the valley as a benchmark and research area appears the only choice."

It should be noted that by 1992 Robson Bight Provincial Park had been created and a further area of 6,570 Ha. protected, encompassing the lower Tsitika as well as three existing ecological reserves: Robson Bight, Mount Derby and Tsitika Mountain. Now fully protected are mid-mountain to alpine forest ecosystems and the pristine estuary.

In 1978, Allan Hawryzki co-authored an article with Maxine Carpenter for the Province's Ministry of Environment publication *Wildlife Review* (Winter 1978). The article was entitled:

Vancouver Island Marmot

There are many rare species of wildlife among us, but the Vancouver Island Marmot qualifies as an "exclusive", for several reasons. First of all, with the exception of one species of shrew and an obscure race of meadow mouse, it is the only species of mammal whose entire population spends its life within the boundaries of Canada. In fact, its habitat is extremely limited, consisting entirely of the alpine and sub-alpine regions of Vancouver Island. It has diverged so much from its mainland cousins that it has its own species name - *Marmota vancouverensis*.

Unfortunately membership in this species is truly exclusive on the basis of numbers. According to Dr. Ian McTaggart Cowan of the University of British Columbia, the total world population does not appear to exceed 100 individuals. Our general lack of knowledge about this unique mammal, and about the impact of human activities upon it, is threatening its continued existence.

History: Harry Schelwald Swarth, while working as a field collector for the University of California in 1910, was the first scientist to discover the Vancouver Island Marmot in the mountain peaks near Port Alberni. He published his findings in 1911, but marmots were not reported again for almost 20 years. The next major sighting occurred in 1931 in

the mountains near Nanaimo, and opportunities for study of the marmot are few, even today. However, on the basis of physical similarities and habitat characteristics, these mammals have been placed within the *Caligata* group of North American marmots. This indicates that they probably arose from ancestral hoary marmots which crossed over to Vancouver island on a temporary land or ice bridge during the Pleistocene times, and became isolated there.

Description: Marmots are members of the family *Sciuridae*, which includes squirrels and chipmunks. There are 14 species of marmots world-wide, six of which are found in North America. They are all physically similar, being stout-bodied and possessing relatively short, bushy tails.

Although information is very limited, the typical adult of the Vancouver Island species likely measures 63-71 cms (25-28 inches) in length, has a 20-30cm (8-12 inch) tail and weighs 2.2 to 4.5kg (7-8 lbs). These measurements make it somewhat smaller than its continental relatives but the two most obvious characteristics setting it apart from other marmots are the deep V-shape of its nasal borders and the colour of its coat.

While mainland marmots range in colour from light brown to almost silvery, the Vancouver Island species is a rich, uniform dark brown or black, except for patches of white around the nose and mouth, on the forehead and on the chest.

Although the Vancouver island marmot is quieter than other species, it does use a loud, piercing whistle in situations of danger. It is thought that a series of

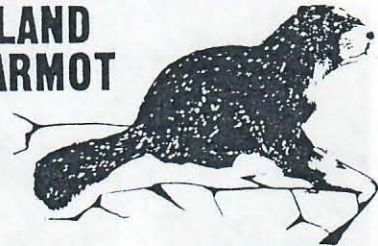
short whistles indicates danger from the air, while a longer call warns of the approach of a predator by land. After the danger is past, the marmot sounds a faint two-syllable call which seems to represent a state of uneasiness. This unique pattern of alarm calls has not been observed in any other marmot species.

Life History And Habitat: The marmot's extended period of hibernation is a function of the harsh winter conditions of its alpine habitat. The deep, wet snow pack in the mountains of Vancouver Island forces the marmot into retirement from late September or early October until early May. At this time, the marmot emerges to mate and to feed on alpine vegetation, especially the flowering parts of these plants. The peak of marmot activity occurs during July and August, particularly during the mornings and evenings. At midday, the marmot may take to its burrow, which is often located around a large boulder on the edge of an alpine slope. In this way, the cliff slope can be used as an observation point, and as a retreat from danger. The young are usually born in July and the average litter consists of three infants. They are born with black fur, and probably don't show adult colour markings until they moult for the first time during the next summer.

Future: The Vancouver island marmot must overcome a number of factors working against its survival. Present evidence indicates that this bright-eyed little mammal is leading an extremely precarious existence. One colony, currently being monitored, appears to be almost exactly the same in population as it was over 40 years ago. Colony sizes are extremely small, usually consisting of

30 members at the most. This condition, together with the fact that the colonies occupy what could be called "islands" on mountaintops, means that they are in serious danger of extinction, one small colony at a time. For example, even though logging companies have in some cases agreed to leave intact the timber adjacent to known colonies, the effect on marmots of logging operations within their immediate environment remains unknown. There is a possibility that treed corridors may be necessary to ensure migration between isolated mountain top colonies in order to allow for breeding between these groups. The increased use of alpine areas for recreational activities can lead to further disruption of marmot habitat."

THE VANCOUVER ISLAND MARMOT



AN ENDANGERED SPECIES
as rare as the whooping crane

**You can help
save this animal
from extinction**

- Do not camp in or walk through marmot colonies
- Keep dogs leashed near marmot habitats
- Make others aware of the status of the endangered Vancouver Island Marmot
- Report any sightings to the Fish & Wildlife Branch, Nanaimo

THE VANCOUVER ISLAND MARMOT IS A PROTECTED SPECIES

Special thanks to D. Heard, Department of Zoology, U.B.C. for information contained in his M. Sc. Thesis, "The Behaviour of Vancouver Island Marmots, Marmota vancouverensis", January 1977.

The authors: Allan Hawryzki is Regional Vice-President, Vancouver Island, Federation of B.C. Naturalists. He is a faculty member at Malaspina College, Nanaimo, B.C., where he teaches courses in Biology and Natural History. Maxine Carpenter is a technical writer with the Canada Works Environmental Recreation Opportunity Study.

1979-80

On The Likelihood Of Having To Eat Ourselves

"People have become uneatable. They contain too much DDT.

- graffito, Oxford.



Kim Goldberg

The Nanaimo Field Naturalist club holds a very special place in my memories, for it was the first group I joined when I moved here in 1977. And it was here among the naturalists that I made my first friends in my new community that has now been home for twenty years.

Although I studied biology for five years before moving here, it wasn't until I joined the Naturalists that I actually learned to look at the world around me. It was with naturalists that I discovered the simple grace and beauty of a Great Blue Heron spearing fish and frogs, and of a Pied-billed Grebe coursing proudly through the water with two zebra-striped chicks in tow. With naturalists I experienced the thrill of spotting a seldom seen Green Heron at Buttertubs Marsh. And it was with naturalists that I journeyed to Vancouver Island Marmot colonies high in the mountains awash in wildflowers, to marvel at these friendly, playful creatures who seemed oblivious to their endangered status. By joining this club I discovered another dimension to biology, one that can't be entered by pouring over text books or peering through microscopes. Without the naturalists, I never would have found the many special and unique

places on Vancouver Island with its bounty of natural wonders.

Brian Wilkes was club president when I first arrived in 1977. As I recall he urged the club to get involved in various political and environmental issues affecting our community and natural surroundings. (Duke Point springs to mind) At some point I became club secretary, which was quite a step for me at the time because I had never even been a member of an organization before, let alone on an executive. At that stage in my life, public speaking was an unwelcome, sweaty -palmed ordeal, a fact which people who know me now seem to find surprising. But by 1979 I found myself doing more public speaking in one night than I had throughout five years of classes because I ended up as club President. And, as if one two-year term weren't enough, I came back for a second in 1983-85.

Club dues were lower then - a mere \$7 for single members and \$10 for a family. The newsletter was a lot slimmer too, often just a one-page calendar of upcoming club activities. I do recall however that we had a large membership during that period. At one point our records listed 200 members. We had big turn-outs on our outings too. I recall one Cedar outing where 40 people showed up! It was more like leading a platoon to the front than taking a quiet, exploratory amble through the woods. The monthly club meetings were invariably followed by a trek down to a local pub where we would pull enough tables together to hold however many of us showed up. We had at least one Midnight Madness beach outing where, with the use of flashlights, we did some fascinating fossicking around Stephenson Point at extremely low tide. The club also sponsored some very popular whale watching cruises aboard the Lady Rose and sea lion cruises out from Nanoose.

What did I personally want to accomplish during my two terms? I wanted the club to have a high-profile presence in the community and to reach out to new people in the same way it had been there for me, so that increasing numbers would come to know and appreciate the fascinating plants and creatures that share this island with us...because, with appreciation comes respect, and with respect comes protection and preservation. Sincerely, "Kim"

.....
The Executive for 1979-80 were:

President:	Kim Goldberg
Secretary	Adele Routledge
Treasurer	Gwen Johnston
Activities Co-ordinators:	
	David Routledge
	Ken Knowles
	Bill McMillan
Membership	Art Wirth
Publicity	Donna Bohoslowich

.....

The Pink Rhododendron

In June 1979, Pauline Tranfield, President of the Arrowsmith Naturalists and Kim Goldberg, Bill Merilees and others of the NFNC got together. The two clubs entered into a joint "interpretative program" at Rhododendron Lake. The program was made possible by the Northwest Bay Division of Macmillan Bloedel which made access to the site possible. The Parks and Outdoor Recreation Division of the Provincial Government provided

trail signs to the interpretative site. For three weekends the program operated for hundreds of visitors to the site.

The brochure (by Bill McMillan) handed out to visitors explained that: "the Pink Rhododendron has a limited range, occurring on the west coast of North America as far south as San Francisco and as far north as southern B.C. Its distribution in B.C. is limited to Hope, a few localities near and in Manning Park, and two places on Vancouver Island - Rhododendron Lake and an area near Port Renfrew on the west coast. In B.C. the Pink Rhododendron is **protected** as is our provincial flower the Pacific Dogwood. Seeds may be obtained from wild shrubs in September, but since these will take about 7 years to bloom, it is preferable to obtain small plants from nurseries for your garden."

[Ed. Note: There is an account of how these Rhododendron shrubs were discovered, written by Bill Merilees, in the Vancouver Natural History Society's Discovery magazine Vol. 10, No. 2 (No. 188) 1981. Apparently in 1912 "George Tranfield while setting trap for marten, noticed the large leaves of a shrub he had never seen before. Later, while building a lean-to-cabin in the same area, he saw the large pink flowers. The shrubs were so tall that he could walk right under the blossoms!"

It wasn't until the 1930s during a discussion about native plants at a meeting of the Lark Natural History Club in Parksville, that George mentioned he knew where Rhododendrons grew. No one believed him. The only way to settle the matter was to visit the site, then known as Kalmia Lake. After quite a scramble, as there were no roads to or near the lake, a number of members arrived and saw the shrubs for themselves.

The Club's secretary wrote to Professor John Davidson of the Botany Department at UBC (and founder of the Vancouver Natural History Society) about this discovery. The reply was

rather curt, to the effect that "there is no such shrub on Vancouver Island". Well!!! Seeing is believing!

The site is now quite different from that first viewed through George Tranfield's eyes. After the forest canopy was opened up by different logging companies, the once tall, spindly Rhododendrons have progressively taken on a more compact form."]

Vancouver Island Marmot Survey

(J.D. Routledge - Field Co-ordinator)

This summer has been important for the FBCN's Vancouver Island regional clubs, the Nanaimo Fish and Game club, the provincial Fish and Wildlife branch and others who make up the Marmot Protection Committee.

The Committee received a grant from the government to cover wages and expenses for two workers and this field co-ordinator to do a survey and inventory of Vancouver Island. Our mandate was to cover alpine areas where the Vancouver Island marmot might possibly exist and to record actual sightings.

Included in the grant was a publicity clause so that the plight of the marmot could be publicized as widely as possible. This project has attracted the attention of several Island newspapers from Campbell River to Victoria. In addition, our club members have appeared on the local radio, the Fish and Game club show, and CHEK TV in Victoria taped a "live" show at one of our local mountains.

Malaspina College has also been involved preparing a video tape for Canadian school children. The College has provided the film, cameras and recording equipment.

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The elusive Clarke's Nutcracker

October 26th, 1979 was a stormy day with heavy rain and strong southeast winds. I was driving down Turner Road nearing the Is. Highway, when a Clarke's Nutcracker suddenly flew up from the roadside into some coniferous growth. I parked the car and walked back to watch it at close range for quite some time. This denizen of subalpine habitat from the Coast mountains to the Rockies, has occasionally wandered down to our coast as well as east to the prairies. Seven were recorded in the Victoria-Duncan area back in 1972 and in the Vancouver region five were seen that same year. All of these sightings were at the same time of year - late October and early November". - *Don Blood.*

Owling Field Trip - Jan. 1980

Sixteen people attended the owling session held this year at Ed and Mary Barraclough's home. The stars were sparkling on this bright clear, crisp moonlit night; the leaves crackled under our feet as we tried to *quietly* cross the meadows. After several attempts to call the owls, we had to give up as none responded. The evening was by no means a total loss, however, as we were treated to hot coffee and snacks, and two films on water fowl identification. Both films were obtained from the Fish and Wildlife (Nanaimo) Branch. One film was narrated by Bing Crosby and the other by Roger Tory Peterson. The photography was superb and showed migration routes, the mating behaviour, nesting and general marsh life of these birds as well as their identification in flight. Thanks to Ed and Mary for a good time had by all. - *Adele Routledge*

More Walks and Hikes in the Nanaimo area

(Gwen and Angus Johnston)

Extension

South of Nanaimo, turn right at the Chase River cut-off onto Extension Road. Drive out past the Cinnibar Valley subdivision. Park your car and watch for the path on the left hand side of the road which leads in at an angle (an old railway grade from coal mining days). In early April there are many White Fawn Lilies and Trillium as well as Calypso Orchids. In May the banks are covered with Camas, Sea Blush and Mimulus.

Long Lake

Follow the Yellowpoint Road for about 10 miles [16 Kms.] past the Cedar Road junction. Turn left at Long Lake Road. Drive to the end and look for a trail on the left hand side. Follow it a few hundred yards then turn right on the downhill trail, which crosses a marsh and leads to Long Lake. This trail will also lead to Priest Lake a few miles further on.

The Nanaimo River

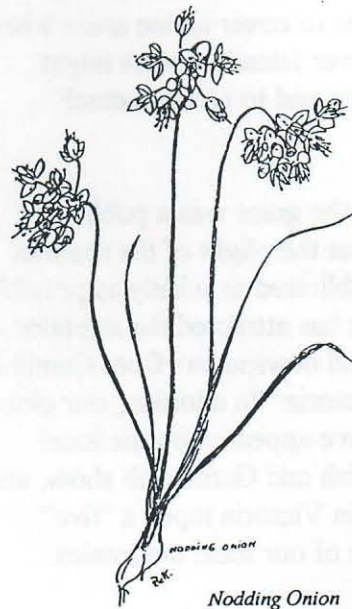
This is a nice easy hike and a chance to see hundreds of spring wild flowers. Turn in at Fry Road, just before reaching the Nanaimo River Bridge on the Island Highway. Follow the dyke down to the river for a mile or more. On leaving the dyke, the trail goes through some timbered land. In a short while you will come to an area that in springtime is carpeted with wild flowers.

- ☞ From May 4- 10 the Nanaimo Field Naturalists sponsored the FBCN summer camp at Nanoose Bay. The Camp director was Bill Merilees.

The Elton Anderson Award

This Award, established in 1975, is to recognize people who have emulated to a profound degree the dedication, devotion and energy exhibited by former FBCN President Elton Anderson. The purpose is to recognize their outstanding service to the FBCN in the field of conservation, in the promotion of the aims and objectives of the Federation, or for their outstanding communication of natural history by way of exemplary newsletters, resolutions or briefs.

In 1980 the recipient was Bill Merilees.



More recipes:

Grosbeak Goulash

1/2 C. sunflower seeds 1/4 C. All-Bran

1/2 C. hamster pellets

1/3 C. dog biscuits 3/4 C. suet

Combine sunflower seeds, hamster pellets, crushed dog biscuits, and all-bran into a coconut shell half. Set aside. Grind suet and melt in a double boiler. While still liquid, pour over mixture in coconut shell. Refrigerate to harden and hang in branches.

Flicker Fricassee

1 C. grape nuts

1 C. raisins

1 1/3 C suet

1 C. peanut hearts

Combine all ingredients (except suet) in an 8" x 8" cake pan. Set aside. Grind suet and melt down in a double boiler. While still liquid, pour over dry mixture. Refrigerate until firm. Cut into pieces and serve in plastic coated wire basket firmly attached to tree trunk.

The 1980 Christmas Bird Count turned up some "unusual sightings for the Nanaimo area":

Peter van Kerkoerle found a Green Heron on Victoria Road and a Golden Eagle in Cedar. Derek Connelly recorded a Purple Martin at the Nanaimo River Estuary, while Rick Ikona called out 5 Virginia Rails at Buttertubs Marsh. A Grey-crowned Rosy Finch was sighted *[but not on Count day, unfortunately]* in Pipers Lagoon by Bill Merilees. He also spotted 9 Cattle Egrets in Lantzville.

On the subject of Cattle Egrets, Bill Merilees had this to say:

"Since the sighting of the first Cattle Egrets in British Columbia in late 1970,

many additional sightings of this species have been recorded, particularly along this province's southwest corner. Observations indicate that the species can be expected to occur almost anywhere in B.C. between early October and mid-January, and occasionally in May.

"The Cattle Egret is a sociable bird over most of its range. It is usually seen in small flocks with domestic cattle or big game animals. In B.C. however, all previous sightings had been of single birds. In 1979, small groups of Egrets began to appear. The presence of a flock of 9 near the Island Highway at Lantzville on October 25, 1980, is very noteworthy. These birds were observed by Sandy Shaw and myself. Later, as many as six birds were seen in the Cedar area by Stan Devereaux.

"Originally, the Cattle Egret was known to occur only in Africa and Eurasia, but has since spread to the Americas, Australia and New Zealand. In Australia, Cattle Egrets were introduced in an attempt to control noxious insects in cattle country. But whether they became established through this action or from natural dispersal is not certain.

"In B.C. Cattle Egrets appear to have a difficult time as a number have been found dead of apparent natural causes. Greatly reduced body weights, and empty stomachs indicate that starvation may be the cause. Whether the Cattle Egret will become a breeding species in this province therefore is uncertain."
[Ed. Note: Up to 1997 it had not done so.]

1981-82

On Just Who Really Is To Blame Here

"Growing and decaying vegetation in this land are responsible for 93 per cent of the oxides of nitrogen."

- Ronald Reagan 1982

More Thoughts On Blame

"Accuse not nature, she hath done her part. Do thou thine."

-John Milton, 1667



Bill Merilees

Thinking back to my first presidency a few things do stand out. First was the controversy and mess that arose as the Vancouver Island Marmot Study came to an emotional conclusion.

Second was our club's involvement with sealion and whale watching trips. These events were really 'value added' for being a member of the Nanaimo Field Naturalists. The other issue was one that faces every president and that is the building of an executive team. I have always been very lucky in this regard: Peter and Anneke, Beth Pepler, Derek Connelly, Marg Walker, Margaret Holm and Gwen and Angus Johnston spring to mind.

I recall too bringing in 'travel nights' where members got to show slides and talk about their personal travels or favourite natural history areas. Our regular meetings were targeted at Club and local issues.

One thing that was always very important to me was the fact that I was a public servant. As such I had to be careful of what I did and how it might be perceived. I was appointed to a Provincial Committee to deal with a Marmot-related issue which meant I had to resign as Club

president on rather short notice.

The BC Naturalist around that time carried an article by Kim Goldberg on my activities in this respect. Sincerely "Bill"

[Ed. Note: The Vancouver Island Marmot Preservation Committee (to which Bill Merillees alludes in his above letter) was comprised of the FBCN's Vancouver Island Regional Naturalist clubs. A serious split in the Committee occurred when members could not agree on what type of activities should be carried out and, as a result, apparently, the field supervisor left with all of the Committee's field notes, records, files, posters, photographs and equipment - which were never recovered.

Hard working members of that original Committee and its successor, the V.I. Marmot Liaison Committee, did much to publicize the plight of the Marmot. Today, thanks mostly to Andrew Bryant, this endangered little animal has its own Website on the Internet. Now anyone, anywhere can "tune in" and learn more about Marmota vancouverensis.

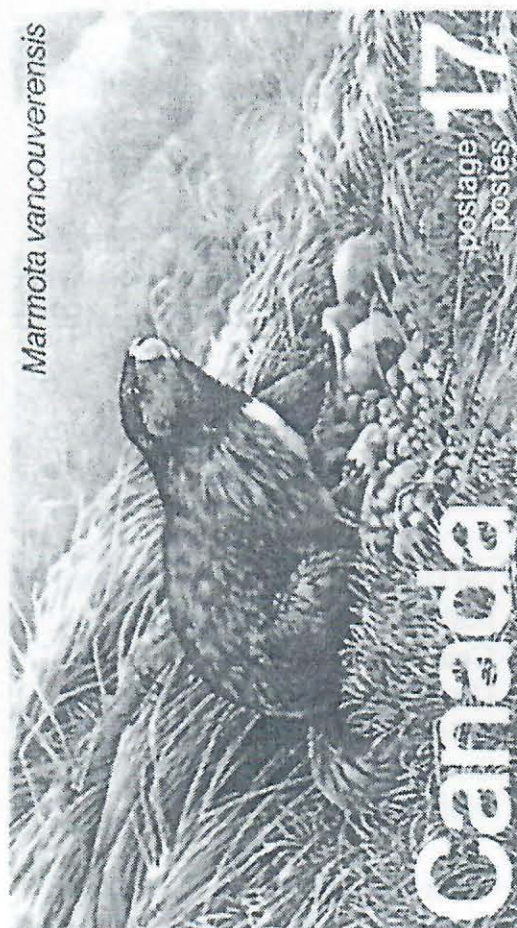
Meanwhile, the B.C. Ministry of the Environment's Wildlife Branch has continued with its mandate to carry out the Marmot Recovery Plan in other ways, under the watchful eye of its Regional Wildlife Biologist (Doug Janz). Scholarly research done under government grants in past years has included Robert Milko's work on vegetation and analyses of Marmot diet and Andrew Bryant's population dynamics and genetics research. He [Andrew Bryant] reported in 1997 that, regrettably, the Marmot population has tumbled from 2-300 in the 70s to about 150 today. It is predicted that they will be extinct in less than 10 years unless something drastic is done to prevent it. Included in the Marmot Recovery Plan for the next 5 years, therefore, is the transfer of 2 or 3 animals to the Toronto Metropolitan Zoo for captive breeding. What is learned from that effort may be applied to future captive breeding in the wild...in sheltered, fenced areas free from predators like the Golden Eagle and the Cougar.]

The new Executive for 1981-82 were:

Vice-President - Derek Connelly;
Secretary - Marg. Walker; Treasurer -
Betty McIsaac; Membership - Colen Henson;
Program - Rick Ikona; Newsletter - Chris
Anton; Publicity- Jennifer Soer; FBCN Del-Al
Hawryzki; Bird Hot Line - Mark Saunders;
Thrush - Margaret Holm; Hospitality-Anneke &
Peter Van Kerkoerle, Gwen & Angus Johnston.

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In 1981 Canada Post issued a new stamp
- The Vancouver Island Marmot. The
artist was Michael Dumas.



- ☞ In March 1981, the annual banquet organized by Ed and Mary Barraclough, was held at the Nanaimo Golf and Country Club with guest speaker Rob Cannings, the Curator of Entomology at the Royal B.C. Museum in Victoria.
- ☞ April 4th and 5th were set aside for two ten-hour cruises down the Alberni Canal and out around Barclay Sound to see the migrating whales and other marine mammals and birds.
- ☞ Later in the spring club members teamed up with Cowichan Valley naturalists for a Romp in the Hamilton Swamp, a Gambol on Thetis Island and a [sedate] Visit to the Sutton Creek Wildflower reserve.
- ☞ The Club co-sponsored the Annual General Meeting of the Federation of B.C. Naturalists in Parksville on May 8th and 9th.
- ☞ On June 14th the club had its big wind-up barbecue in Bowen Park with Chief Cook - Bill Merilees!

☞ On December 27th, 1981, the club held its **10th Christmas Bird Count**. They counted 108 species. Unusual species were 1 Snowgoose; 1 Redhead; 3 Canvasback; 82 Bohemian Waxwing; and 1 Mockingbird.

Now that Mockingbird was indeed an unusual sighting and merited a "write up" in the 1982 edition of the *Thrush* by Derek Connelly and Margaret Holm:

Mockingbirds are slender-billed, long-tailed birds, grey above, greyish-white underneath with two white wing bars and a wide white patch on its black wings. They often flick their long black tails that have distinctive white outer tail feathers. Similar birds include the Northern Shrike - which has a black face mask - and the Townsend's Solitaire - which has a white eye-ring and dark grey breast.

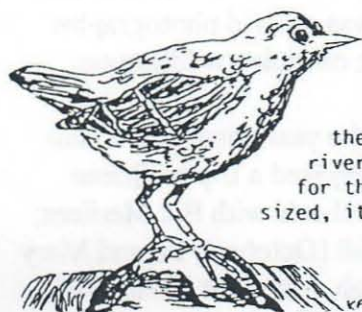
The Mockingbird imitates other bird calls and songs, usually repeating a phrase several times. They feed on insects and fruit. Its closest nesting range is northern California, although once a female built a nest and laid infertile eggs in Victoria several years ago.

This bird is considered rare to casual in southwestern B.C. The lower mainland has had 20 sightings over the past 15 years. It can make its appearance at any time of the year and may stay several months in one location. This particular Mockingbird arrived in December at Malaspina College and was first identified by Peter van Kerkoerle. It could be found each day within a small area, feeding on *cotoneaster rotundifolia* berries. It remained there until February and was photographed by Rick Ikona.

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In January 1982 the Club received a grant of \$11,278 from the Community Development Program to hire four people to work on a tourist enrichment project. In addition to producing two pamphlets, one on Newcastle Island and the other on Cathedral Grove, they produced trail maps for Elk Falls, Helliwell, Little Qualicum, Rath Trevor, and Hemer Provincial Parks. The four

hired were Janice Bennett, Kathleen Francis, Colette Daudelin and Lori Warick. Their supervisors were Kim Goldberg and Bill Merilees. Here are examples from both brochures:



NO. 3--
THE DIPPER

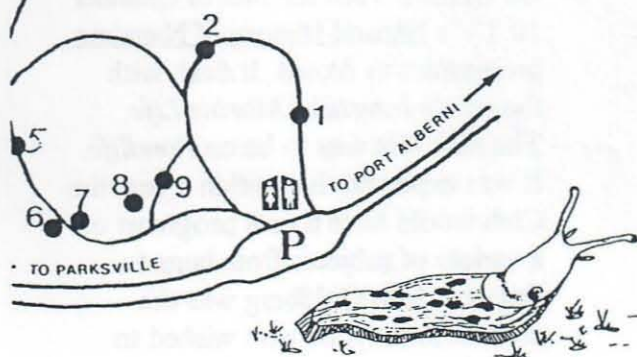
As you walk along the crystal clean river, watch carefully for the dipper. Thrush sized, it has soft charcoal grey plumage. Dippers are often seen on a stream-side rock doing "deep knee bends"; hence their name "Dipper". This bird of mountain streams has the unusual ability of being able to walk and swim underwater.

NO. 4--CRYSTAL POOLS

Notice the incredibly clear water of Cameron River which began its journey high on the slopes of Mount Arrowsmith. From mountain snowfields, along a bed of filters, its clarity is refreshing; its purity makes it clean enough to drink.

NO. 5--TWISTED CEDAR

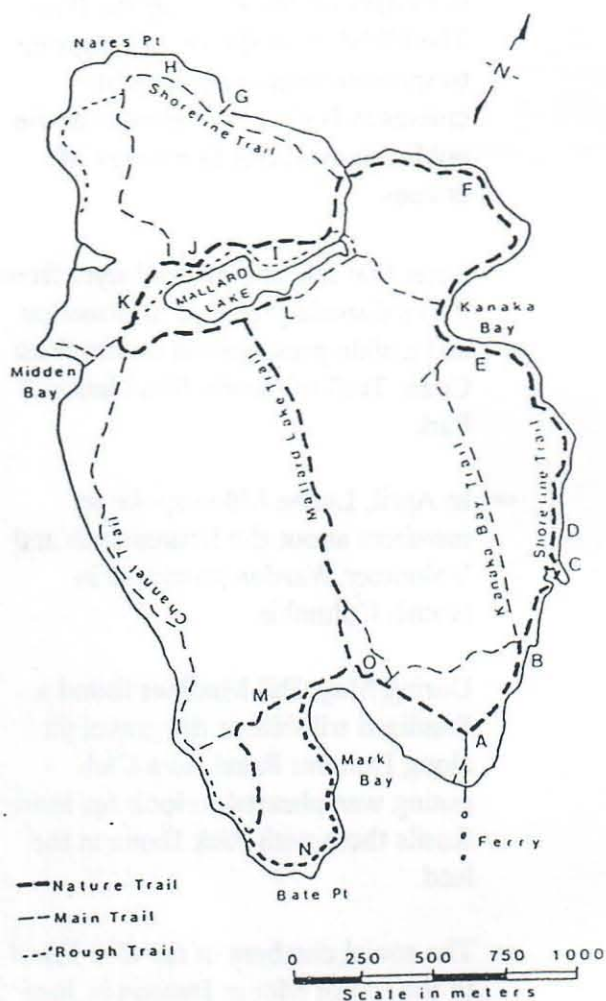
Be sure to observe the twisted cedar just ahead of you. Any number of elements may have caused the wood to twist. One possibility is internal stress caused by moisture variations; another is that lightning may have struck the tree at some point in its life.



Banana Slug

NO. 6--UPSIDE-DOWN TREE

Look carefully at this tree. Do you notice anything unusual about it? That's right, it's upside-down! Years ago, this piece came crashing down from a nearby tree. The impact was so great that it stuck into the ground upside-down.



Allow 20 minutes for every kilometer

Nature trail loop (round trip)	9	km
Bate Point loop (round trip)	3.5	km
Midden Bay via channel trail (one way)...	3	km
Mallard Lake via shoreline trail	2	km
Kanaka Bay via Kanaka Bay trail	1.5	km
Kanaka Bay via shoreline trail	2	km
Nares Point via shoreline trail	4	km

Besides busying themselves with educating the public by way of the brochures, the Club also sponsored two days of sealion cruises to the Winchelsea Islands and Nanoose Bay in early March of that year. The cruises left from Schooner Cove

dock at 10:00 a.m. and 1:00 p.m. on both days on the *Pride of the West*. The NFNC was the very first group to sponsor sealion and wildlife cruises in B.C. 100 members of the public enjoyed this first series of cruises.

- ☞ Later that month, Bill McIntyre from Parks Canada provided information and a slide presentation on the West Coast Trail of Pacific Rim National Park.
- ☞ In April, Lynne Milne spoke to members about the Ecoreserves and Volunteer Warden programs in British Columbia.
- ☞ During May, Bill Merilees found a fossilised trilobite at the gravel pit along Dumont Road, so a Club outing was planned to look for more fossils there with Rick Ikona in the lead.
- ☞ The social climbers of the club hiked to the top of Mount Benson in June with their leader Chris Anton; and later that month they held their annual club picnic. That year the annual feast was held at the Nanoose Brickyard. They wandered along the nooks, crannies and rocks of the bay to observe intertidal organisms in the late morning and had their picnic in the mid-afternoon.
- ☞ In July a group, led by Vivian Heinsalu and Al Hawryzki, met at the Cassidy Inn at 4:30 a.m. [*uh, that is very early in the morning folks!*], for a day long hike up Green Mountain to count Marmots. Vivian Heinsalu worked with the Wildlife Branch and

was part of the team studying these colonies.

- ☞ A week later, the Club had a trip to Paradise Meadows and Mount Washington to photograph wildflowers with Al Clemens in the lead. Al was an avid photographer and expert on alpine wildflowers.
- ☞ Earlier in the year some of the club members enjoyed a trip to Queen Charlotte Islands with Bill Merilees; so in the fall (October), Ed and Mary Barraclough, Margaret Holm, Bob and Barbara Graves, Jay van Ostdam and Bill held a 'pot pourri' of slides and memories of that trip for the benefit of their fellow club members.
- ☞ Also in October Rick Ikona announced that he was looking for participation of club members in weekly and bi-weekly observations of waterbirds on selected waterways within the City of Nanaimo boundaries.
- ☞ On October 18th the first of Channel 10 TV's Natural History of Nanaimo programs was filmed. It dealt with the area's *Intertidal Marine Life*. The next film was to be on *Pondlife*. It was expected that within a year the Club would have 6 or 8 programs on a variety of subjects from bugs to flowers. Kim Goldberg was the contact for anyone who wished to participate.
- ☞ October was a busy month for the Club as it sponsored another nature cruise - this time on the *M.V. Arabella* - around Nanaimo Harbour and out to Snake Island. They

viewed waterfowl as well as schooling salmon prior to their move up the Nanaimo River to spawn.

- ☞ At their regular travel night in November Bill Merilees entertained everyone with slides of his fascinating life on MacQuarie Island in the Antarctic where he had been biologist with an Australian National Antarctic Research Expedition.
- ☞ The Annual Christmas Bird Count that year was held on Boxing Day

Hiking in the Nanoose Point Area

(Gail Wiseman)

Nanoose Point has some wonderful opportunities for hiking and nature study. The whole area is a network of old roads and trails. The terrain is incredibly varied: coastal bluffs and meadows with Arbutus and Garry Oak, densely wooded valleys and draws, lakes and low lying swampy areas, old farm pastures and rocky outcroppings.

The Nanoose Bluffs are one of the best places I know to study coastal spring wild flowers. The bluffs are close to Nanaimo and easily accessible by car. The meadows are perfect for an afternoon walk with a child, or an out-of-town guest. Take a camera, or sketch book and a picnic for this is a place to linger.

From mid-March through June there is an ever changing array of Camas, Shooting Star, Spring Gold,

Mouse-eared Chickweed, Fringe cup, Saxifrage, Death Camas, Sea Blush, Larkspur and Monkey flower. Take the higher levels to find Chocolate and Curly Lilies amidst the trees, or go lower down to find Sea Blush, Blue-eyed Mary and Stonecrop. Listen and look for Blue Grouse in mating plumage on the heights of the ridge. Watch for blue Harvest Brodia, Wild Hyacinth and both Hooker's and Nodding Onion amidst the Woolly Sunflowers and Yarrow as the grasses dry later in the season. Access to this area is through the Gary Oaks subdivision.

The Circuit Hike (Nanoose Hill through the old farm to Richard's and Wallis Point, then back via Brickyard Bay and the old logging and farm roads.)

Access is by road from Nanoose Hill **or** from Brickyard Bay. For the *latter*, take the road through Schooner Cove as close to the end of the Point as possible, then just before it takes a sharp left turn, park your car and continue walking straight to Brickyard Bay.

Nanoose Hill to Old Farm: Take the left fork when the trail from the water tank reaches the high point of Nanoose Hill. Follow the trail downhill through a wooded draw. At the bottom, the trail opens out into pasture littered with old farm implements. Straight ahead is Powder Point Road (the paved road which runs from Northwest Bay Rd to the military base). The right-hand fork goes to the naval base which is restricted. The paved road to the left will return you to your car via Enos Lake.

Old Farm to Richard's Point Take the left fork through the farm, and just past a

cow barn take another fork to the right. (The left will take you across the old farm roads to Brickyard Bay). This right fork heads down to the military campsite at Richard's Point. On this road, about half way along, you will pass a wonderful, huge old stone structure...an old storage building from the powder works.

Richard's Point to Wallis Point At the beach, take a trail to the left and follow it along until it climbs the cliff. Follow the trail along the cliff through the Garry Oak and Arbutus trees to Wallis Point.

Wallis Point is connected to the mainland of Nanoose Point at low tide and is a lovely place to explore. Be sure to come here in early spring when the area dances with Curly Lilies. The southern exposure has a whole field of Lilies and Sea Blush blooming earlier than anywhere else I know!

Wallis Point to Brickyard Bay (via 2nd Bay) From Wallis Point follow the trail *above the beach* along the coastline. Walk the beach if you like, but it is hard going and slippery, and impassable at high tide. The trail turns toward the beach half way along, but if you rummage around you will find a fork which continues through brush, until you are walking along the head of the Bay. Eventually you will come to a grassy logging road. This leads down to the beach in one direction, and back up to the farm in the other direction. The first right turn will take you out past a pond and across a creek, then *roughly* along the coastline to Brickyard Bay. You can also pick up a trail at the beach to do the same thing, but you will have to find the one spot where the creek can be crossed.

Once in Brickyard Bay, take the road up towards Schooner Cove and then on to an old road which angles in from the left. Follow it past a gate and barrier, then curving on past old pastures, swamps and trees. Keep to the main track unless you want to explore. At the only major fork turn left to return to the old farm.



Yellow rumped Warbler

P.K.

1983

A Fine Point Respecting An Industrial Waste Dump In Hamilton, Ontario.

"It turns the stream black and will kill some fish, but it doesn't constitute a health hazard." -Ian Cunningham, medical health officer, 1979



Rick Ikona

After I spent a couple of years studying biology at the University of Victoria, Katherine and I married in 1975 and moved to Vancouver. For the next five years we enjoyed frequent walks in Stanley Park. It was there I eventually found myself focusing

my general interest in nature towards birds.

We moved back to Nanaimo in 1980 and joined the Nanaimo Field Naturalists in 1981. The following year I became part of the executive as Program director. In 1983 I replaced Bill Merilees as President when he stepped down due to work obligations. This I volunteered to do despite not liking to chair meetings. By the end of that year I happily returned to the position of Program director. During my short time as President I tried to stress club outings, feeling this was the best way for people to learn about nature. That year the club had trips to Bamfield and Port Angeles. One outing I especially recall was our Midnight Madness.

Since the birth of our daughter, Chelsea, Katherine and I have had to scale back our involvement in the Club, but we look forward to becoming active again someday. In the meantime, our best wishes to all for another 25 years!
Sincerely "Rick"

After Bill Merilees resigned in December 1982, members were suddenly without a helmsman; and with the Vice-President, Derek Connelly having moved 'across the strait', the Club was left with two of its three signing officer positions vacant. *A dire situation indeed!* But, Rick Ikona valiantly volunteered to form a new Executive for 1983. His team:

Vice-President	Al Hawryzki
Secretary	Kathy Ikona
Treasurer	Betty McIsaac
Membership	Colen Henson
Program	Jay Van Ostdam
	Gail Wiseman
Newsletter	Chris Anton
Publicity	Kim Goldberg

- ☞ Around this time Rick also took over the **Bird Hot Line** which had been started a few years previously for the Nanaimo area by Mark Saunders.
- ☞ They kicked off 1983 with a Midnight Madness of beach seining, looking for life forms with flashlights during a very low, low tide near Departure Bay.
- ☞ The Club's annual cruise to view sealions and marine birds in and around the Winchelsea Islands, was held on the weekend of Feb 5 and 6. There were two trips on the Saturday and one trip on Sunday....actually there were two trips planned for the Sunday but one was booked up with *hundreds* of Cubs. "Sealions beware!" said the Newsletter editor of the day.
- ☞ Nearing the end of February, the Nanaimo Field Naturalists hosted a field trip for the Vancouver Natural

History Society. They met the mainlanders at the Departure Bay ferry dock in early morning, then took them out to sea to view herring spawning 'grounds' and marine birds.

- ☞ During Easter club members spent the weekend at Bamfield Biological Station exploring coastal marine organisms with expert interpreters. The trip netted the Club a profit of \$254.
- ☞ The following weekend saw a group on a wildflower exploration of Sutton Creek and the Nitnat River especially to see Pink Fawn Lilies. It was another opportunity for them to learn nature photography tips from Al Clemens.
- ☞ In May the N.F. Naturalists received an invitation to the opening of the Honeymoon Bay Wildflower Reserve; later that same month, the official public opening of Diver Lake Park occurred and Bill Merilees acted as nature interpreter on behalf of the Club.
- ☞ During July and August the mountaineers in the Club climbed to the top of Mount Benson, Mt. Arrowsmith and Paradise Meadows on Mount Washington.
- ☞ Also in August they had an Intertidal Walk in daylight to see where they had been on their Midnight Madness 6 months earlier. It was another very low, low tide.

- ☞ September was apparently a good month for a birding trip to Port Angeles on the ferry.
- ☞ On October 2nd members again enjoyed their famous hike and hotdog roasts at Little Qualicum Falls Park, meeting first at the Coombs market. This was the day after they had hosted the FBCN Directors meeting. They had provided transportation to and from Malaspina College and the Ferry for the mainland participants as well as organizing and supplying the refreshments.

One of the issues that most concerned club members in 1983 was the plight of a large colony of Cormorants and Herons at Bare Point in Chemainus. The Cowichan News had reported that:

"The cliffs at Bare Point near Chemainus are home to a unique collection of hundreds of seabirds, namely, two species of Cormorants and a growing population of Blue Herons. Wayne Campbell, Associate Curator of vertebrate zoology at the Royal B.C. Museum, said the oddly-integrated colony is the only one of its kind in the world known to scientists. For unknown reasons, pelagic cormorants began moving in increasing numbers into the rock 'apartments' and along the ledges formed by erosion in the cliffs. These cliffs are now among the Strait of Georgia's top three breeding sites. About 200 pairs visit the area annually"

The larger population of pelagic cormorants paved the way for its tree-nesting cousins, the double-crested cormorants. This species, which nest only along the inside Gulf islands, had

been frightened away from favourite nesting locations elsewhere by aggressive seagulls. The aerial congestion caused by pelagic cormorants tends to keep the gulls at bay in their new nesting site. The birds seem to be happy even though they are almost nest-to-nest in the trees lining the shore below the Point.

"This year, for the first time, three or four nests of Great Blue Herons have occurred in the trees beside the cormorants. Campbell said this development is very unusual and speculated that the herons are attracted to the trees because of the plentiful food on the tidal flats below and because they can feed their young with food stolen from the cormorants. There are only between 30 and 40 known heron nesting sites in B.C."

So what was the problem? Well, Christy Lapi made that clear in her article of March 2, 1983 in the Ladysmith-Chemainus Chronicle:

"A proposal by Island Lime Ltd to ship agricultural lime from the west side of Bare Point in Chemainus is drawing increased fire from environmentalists concerned about the fate of the unusual colony of cormorants and herons nearby. Island Lime is also considering allowing Westridge Industries to ship Copper Canyon shale from its shipping facility if its application for foreshore lease is approved by the provincial lands branch.

The developer said the facility would handle about 28,000 tons of lime annually. The Texada Island lime will be barged in through a scow berth and transported by truck on an industrial road to the west side of Bare Point.

"On the cliffs of Bare Point nests a colony of pelagic and double-crested cormorants, great blue herons and glaucous-winged gulls. Its an unusual colony and opponents believe road construction and truck traffic will eliminate the birds.

"A habitat technician with Fish and Wildlife said that the bird colony includes the second largest known colony of double-crested cormorants in B.C., and the fourth largest pelagic cormorant colony in the province."

Apparently the main worry to naturalists and scientists alike, as reported by Lapi, was that the truck access road would be constructed directly below the cliffs where the pelagic cormorants nest. These birds require cliff faces in isolation for nesting sites and they also need to drop off into a current of air to become airborne; available nesting sites with these features are fairly limited. Workers below the sites building the road would likely frighten the birds away. The rumbling and reverberation from road construction and trucks and front end loaders directly below these nesting sites was also cause for concern that the eggs would be addled, or even jiggled enough to roll out of the cliff nest holes.

Rick Ikona added the voice of the Nanaimo Field Naturalists to those of other concerned citizens, in his letter to the Minister of Lands and Parks:

"As concerned members of the Nanaimo Field Naturalists we are writing to indicate our disapproval concerning the proposed development of a loading dock at Chemainus Bay by Island Lime Products Ltd. Our reason is the existence of a unique colony of three

species of seabirds situated on Bare Point - a rocky peninsula forming one side of the bay and along which the road would be constructed.

"The seabird colony consists of a population of double-crested cormorants and a pelagic cormorant colony. In addition, Bare Point supports a new colony of Great Blue Heron. The combination of birds in a breeding colony is considered unique in the world. The nesting requirements of these birds are such that the proposed construction could both destroy the nesting habitat through construction methods and cause desertion of the colony if the access road is used during the breeding period. This desertion would cause exposure of the eggs to both climatic elements and predation and in effect, cause destruction of the eggs. We would like to bring to your attention the fact that under the Provincial Wildlife Act it is stated that: 'a person who possesses or takes, molests or destroys a bird or the nest or egg of a bird, except by regulation, commits an offence'."

The honourable Minister replied:

"Dear Mr. Ikona, Thank you for your letter concerning a lease application for Bare Point, Chemainus B.C. The application has been disallowed because the area is environmentally sensitive due to the presence of significant bird nesting colonies in the immediate vicinity."

[Editor's Note: As a footnote to this story, I recently asked the Canadian Wildlife Branch (Victoria) biologist, Ian Moul, about the current situation. He indicated that about 75 -100 Double-crested Cormorant nests were there during the 1996 nesting season. No count of Pelagic Cormorants were made but he felt certain they were there. No Herons were seen, but they may be nesting on one of the nearby

areas or islands. At one time there were 85 known colonies in the lower mainland and on Vancouver Island, but Herons periodically abandon nest sites and build new ones, so the exact numbers and locations are continually changing. By 1987, however, the whereabouts of only 25 colonies in B.C. were known. A new Heron survey is planned for 1997.]

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1983-1985

On The Real Utility Of Atomic Energy

"One of the most likely uses of atomic energy seems to be the cooking of the world's goose." - D.O. Flynn 1963.



Kim Goldberg

On election night in October 1983, Kim Goldberg became President for the second time. The new Executive team was made up of the following:

Vice-President	Vacant
Secretary	Mary Baraclough
Treasurer	Lynn Wright
Membership	Colen Henson
Program	Ernie Paget
	Rick Ikona
Newsletter	Karen Mullen
	Katherine Ikona
Publicity	Betty McIsaac
FBCN Del.	Seiriol Williams
Thrush Editors	Peter van Kerkoerle
	Ed Baraclough

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The guest speaker that election night was Joan Lavinger who spoke at length about Morrell Sanctuary's beginning in 1973; studies conducted and reports published on its vegetation and animal life inventories, and on developments within the Sanctuary: - a lake restored and the building of bird blinds, an enclosure for the care and study of deserted fawns and 4 kms. of trails. Thanks to this speaker's inspiring talk, two days later some of the Naturalists enjoyed a quiet morning stroll on those trails.

Some of the other field trips taken that winter were:

- ☞ a visit to the new park in Chemainus and a tour of the murals;
- ☞ birding in Ivy Green and at Transfer Beach;
- ☞ an 'up-Island' birding trip to Deep Bay, Little Qualicum Estuary and Nanoose Bay. [*Much to Rick Ikona's excitement they saw a Horned Lark on that trip.*]
- ☞ And finally, a birding trip to Esquimalt Lagoon and Beacon Hill Park as well as a tour of the Royal B.C. Museum in Victoria.

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- ☞ In February, Rick Davies from Fish and Wildlife spoke on Trumpeter Swans. He said that Vancouver Island is one of the major wintering areas for about 1600 swans, or 20% of the total Trumpeter Swan population. He pointed out that while their population had been increasing, it was levelling off as

Vancouver Island has limited feeding areas for them. He outlined the effects the Swans have on farm fields, the causes of their death, and the need for management of their habitat.

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☞ For several months the Club, under the direction of Kim Goldberg, had been involved in making TV programs about "Nanaimo's Natural History" with such titles as *Winter Water Birds*, *Pond Life*, *Marine Life* etc. The TV tapes were lost for several years after the series was run, and it wasn't until mid-August 1997 that Shaw Cable found the tapes and turned them over to the Club, in care of Bill Merilees who had been the naturalist authority on these television shows.

☞ In April 1984, the Club received a request to participate in the Jim Baillie/[Royal Ontario Museum] Bird Count to help raise funds for the Long Point Bird Observatory ...however, with other projects on their minds, the Club declined. Some of the projects they did support were: \$150 towards the expenses of a graduate student [Andrew Bryant] to study the Marmot population dynamics and genetics. This work would be funded by provincial grants with donations from other natural history societies.

☞ A second project that year was the building of bird nesting platforms on Snake Island to encourage the Double-crested Cormorant to nest further north than the Chemainus area. Regrettably, after the platforms were built and in place, they were

vandalised. As it was too expensive to get out to the island to monitor it, the project had to be abandoned. [By 1997 this cormorant was nesting on Hudson Rocks and the Five Finger Islands.]

☞ Two other projects which required financial help were: Whale Research to which the Club donated \$50.00 and Morrell Sanctuary needed building material for another ramp for the Beaver Pond. This was to facilitate Grades 3 and 4 school children in their "pond dip" studies. The Club donated the \$123.00 needed.

☞ In March, Don Blood gave an "outstanding" slide show of his studies of raptors' nesting sites and habitat in the Canadian North, the Prairies, the Yukon and Newfoundland.

In the fall of '84 a group of naturalists decided to undertake the *tough*[!] task of compiling an inventory of birds on several bodies of water in and around Nanaimo. The surveys were conducted every two weeks over a period of six months. They recorded the weather, wind direction, time of day, species and numbers observed at the Nanaimo River Estuary, Gabriola Island, Buttertubs Marsh, Yorke Lake & Swamp, Diver and Long Lakes, Quennell Lake, Brannan, Westwood and Green Lakes, Long Lake (Cedar), Piper's Lagoon, Departure Bay, and the Rutherford Ponds.

Participants in this Club project included Anne and Tony Thompson, Rick Ikona, Karen Morrison, Mike Chutter, Ingrid Bonsel, Mary Barraclough, Seiriol Williams, Ernie Paget, and Don Blood.

The results of this extensive survey was published in the Vancouver Natural History Society's *Discovery*.

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In 1984, Bill Merilees wrote an article in the *Thrush* entitled *Mammals -the Vancouver Island Box Score*. Here is an extract from that article:

"...there are only 86 species of *terrestrial* mammals native to our province. The question is, how many occur naturally on Vancouver Island?

"By exclusion, Vancouver Island has no moles, pikas, rabbits, ground squirrels, chipmunks, flying squirrels, pocket gophers, pocket mice, pack rats, harvest mice, lemmings, red-backed and heather voles, muskrat, jumping mice, coyotes, foxes, porcupines, badgers, skunks, bobcat, lynx, moose, caribou, bison, sheep or goats native to its shores. From a zoogeographical point of view, Vancouver Island might best be recognized, not by what it has, but rather by what it does not have." [For the answer as to what it does have, see Page 27.]

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In that same edition, Don Blood suggested in his article on Bald Eagle Nesting Sites, that the best times to look for Eagle nests were as follows:

<u>Egg Laying</u>	early to mid March
<u>Incubation</u>	mid March to late April
<u>Hatching</u>	late April to early May
<u>Young in Nest</u>	early May to mid July
<u>Fledging</u>	mid to late July

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The *Thrush* of 1984/85 was heavily slanted towards the birders in the club for

there appeared no less than five out of seven articles on the subject. One such article detailed the fact that Christmas Bird Counts in Nanaimo occurred more frequently in the 1960s than most people supposed.

Earlier Christmas Bird Counts (Bill Merilees)

Christmas Bird Counts have been around a long time. These counts follow rigid specifications laid down by the National Audubon Society which determines when a count can take place and what size the area can be within which birds may be counted. In this manner, and for these reasons, numbers recorded of both species and individuals of a species, provide crude measurements of abundance. On a year to year basis these comparisons may have significant meaning.

From a very modest start Christmas Bird Counts, (or CBCs) have become a ritual to thousands of people in various parts of the world. They have also spilled over in to Spring counts and other similar events.

In Nanaimo our 'modern' bird counts began in 1972 and have continued uninterrupted until the present. What few of us know is that there was an earlier set of counts made from 1963 to 1968. These were organised by Fred Dobson from Vancouver, and made possible by his regular visits to his "in-laws" in Nanaimo. Two members of our club, Alf Flett and Dr. Bill Ricker, participated in a couple of these earlier counts which were published in Audubon Field Notes, the predecessor to American Birds.

Fred Dobson, is an oceanographer now living in Armdale, Nova Scotia. Earlier he worked at the Pacific Biological Station in Nanaimo. Always an active birder, Fred and his family participate in two or three CBCs every year.

The results of these earlier counts are interesting in a number of ways. For one, they occurred when the Crested Myna was still found in Nanaimo. They were also before the Anna's Hummingbird began to appear here. Today, Trumpeter Swans are fairly common, but in the early 60s they were scarce. The total species count for the six years were:

1963	64	65	66	67	68
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74	82	69	55	81	73
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- ☞ In September 1984, Kim Goldberg and her executive team decided to change the format of the monthly meetings. Club business was to be dispensed with in 30 Minutes, beginning at 7:30 pm. The guest speakers were to be scheduled at 8 p.m.. This would be followed by a social hour of coffee, cookies and camaraderie.
- ☞ On September 23rd, club members went on a walk through the Qualicum National Wildlife Area Park located at Kincade Road and the Island Highway - 3 kms past the Qualicum Tourist office.
- ☞ In October, birdwatchers celebrated Thanksgiving with a day trip to Port Angeles with the Ikonas. Later that month, Kim and Shirley Goldberg

presented a slide show of their trip to Russia, at Malaspina College.

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Towards the end of 1984, Don Blood spoke to the membership about the government cutbacks to Environment Canada and in particular to the Wildlife Services Branch. The President and several members of the Club agreed to express their concern in letters to the Minister. In part, this is what Kim Goldberg said in her letter on behalf of the Club:

*"Dear Dr. Blais-Grenier,
The members of the Nanaimo Field Naturalist Club were appalled to learn that Environment Canada is to be reduced by 400 positions, including a 23% staff reduction in the Canadian Wildlife Service. Since the Minister of Finance announced an initial reduction in federal civil service strength of less than 1%, we can't help but wonder why 27% of that reduction has to come from Environment Canada.*

"We understand that several programs of vital concern to us will be drastically cut or terminated including research on wildlife in national parks, monitoring of toxic chemicals, the C.W.S. endangered species program and the program of land acquisition for national wildlife areas.

As active naturalists we particularly deplore the cuts made to C.W.S. and to Parks Canada interpretative programs....."

Madam Blais-Grenier replied, in part as follows:

"Not all research in national parks will be eliminated. Although the reductions [in C.W.S.] will affect some research in western and northern national parks, ...the use of private consultants and universities are being examined

to ensure that Parks Canada's research requirements are met. ...the termination of seasonal naturalist positions in parks will affect only those who offer guided interpretative walks. ...self-guided walks and use of volunteers is being explored as an alternative...I see no reason why our natural resources will decline because volunteers are looking out for them instead of paid government employees". [!]

- ☞ In January 1985 the club held its very first raffle and raised \$38.00. They also kicked off their Membership drive that month with the promise of a \$25.00 gift certificate from The Bookstore for the most recruited.
- ☞ The following month brought the group to a guided tour of Morrell Sanctuary to see the observation boardwalk which the Club had donated.
- ☞ An observation tower at Buttertubs Marsh was being built by labourers from the Brannen Lake Correction Centre.
- ☞ Members went on a cruise to Decourcey Island with Bill Merilees.
- ☞ On March 22nd, the club held a public Nature Quiz as part of its Membership Drive. The Panel was made up of two teams: **Bill Merilees**, Don Blood and Wayne Harling on one team; and **Doug Janz**, Steve Baillie and David Tompson on the other. Several mediums were used to test their skills and knowledge, e.g. written questions, slides, anagrams, animal skulls and bones, as well as a blind-folded 'show and tell'. After an intermission of coffee and cookies, the panel fielded questions from the

audience. Apparently it was a very close contest, but it was Bill Merilees' team which won. Their prize? a *plastic* hedgehog pencil holder!

- ☞ During the month of April, the club held two special bird outings - one to Deep Bay and the other was a combination beachcombing, whale watching (and bird watching) trip to Long Beach.
- ☞ At the start of the May meeting, Al Clemens reported having seen one marmot and hundreds of "avalanche lilies" in bloom on the meadows of Green Mountain. He had also found a pure yellow variety of the "Spotted Coral Root" in the Malaspina College arboretum. *[Ed. Note: From the beginning, club meetings began (before announcements) with members sharing their interesting sightings which were often recorded in the Minutes. This pleasant tradition lasted for more than 20 years.]*
- ☞ In May 1985, the more botanically minded naturalists spent a day examining native plants and flowers in Planta and the Beach Estates Parks.
- ☞ Early in June, several members drove north to Nimpkish Lake to view the "Big Trees" of Nimpkish Island, so actively under discussion by several groups, including the FBCN, which were desperately trying to save them from the forester's axe.
- ☞ On June 23rd the club held its annual BBQ at the Van Kerkoerles. It started with a Scavenger Hunt

organized by Rick Ikona at 1 p.m., followed by the BBQ at 4 p.m..

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On September 15th, the Club's annual autumn hot dog roast at Qualicum Falls was a munching success. The clouds parted and the sun appeared so as to make their hike more pleasant. They spotted a nest of very active wasps, some Scotch broom in bloom and a Dipper bobbing up and down in the river. The highlight of the day was being near the warm fire and roasting hotdogs, with potluck deserts, hot coffee and good company! [Ed. note: This may have been the last of this annual fall event, since no further mention appears in the records after 1985.]

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Around this time, Katherine Ikona and Karen Mullen took over the publication of the new-look Newsletter. This new Newsletter, while the same dimensions as the little *Thrush*, i.e. (8"x 5"), contained a list of upcoming events, speakers, outings, and reports of club activities. Members were also encouraged to send in articles to be included in the new Newsletter. What it really was, therefore, was a combination of the old quarterly *Thrush*, and the monthly 1-page newsletter, only this was to be published every two months.

The original *Thrush* with its bright orange cover, was discontinued in the late 70s. There had been an attempt to revive it in a larger format [*sans orange*] as an annual publication, but only a few issues were attempted in the early 1980s. With this new bi-monthly Newsletter, the *Thrush* seemed to have truly perished ...or had it? One more issue did appear in 1992.

Membership fees were raised to \$10.00 for single and senior members and \$13.00 for a family membership. This fee entitled club members to the new Newsletter 6 times a year; a copy of the BC Naturalists 4 times a year; a meeting with guest speaker 8 months of the year; two barbecues a year; participation in the Audubon Christmas Bird Count each year plus one free Nanaimo area Bird Checklist; and a chance to get together with others interested in the same things, be it hikes, birds, native plants or issues about the natural environment.

Considering the Clubs expenses on a *per capita* basis, this was a very low fee indeed. A breakdown of some of the costs for 1985 were:

Room rental:	\$1.12
BBQs	4.00
Speakers	1.60
FBCN	2.00
Newsletters	2.16
Misc.	1.12
Total cost <i>per member</i> :	\$12.00

With such a tight budget it is no wonder that Kim Goldberg for several months, urged members to consider how (or what) the club could do to raise funds.

Betty McIsaac stepped forward to organize three mall stalls that year. They were to be both fund raisers and an opportunity to advertise the club in an attempt to attract new members. The first mall stall was at Woodgrove on September 20th and 21st; the second was held on Thanksgiving weekend at Harbour Park, and the third in November at Country Club. They sold their home-made bird houses, bird feeders and seed.

Another cost-saving measure was taken when the club moved back to Beban Park for their regular meetings. The room they had used at Malaspina College for so many years was no longer free. It would now cost \$20. Beban Park was charging only \$14.00.

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During 1985 two club enthusiasts from England, Tony and Anne Thompson, carried out various amateur naturalist surveys of Buttertubs Marsh. The following is their account:

"Twenty minnow traps, baited with cheese and/or cookies, were set in the water overnight (on February 23) by the survey organisers, Tony Thompson, Tom Quinn and Sandie O'Neil [*the latter two were employed at the Pacific Biological Station.*] The following morning, the survey leaders were joined by a dozen club members, keen to examine the catch.

"Once the traps had been lifted and the catch identified and counted, it became apparent that Buttertubs did not possess a great variety of freshwater vertebrate life. Three-spined Stickleback were common, 186 caught in total, although none were in breeding condition. The capture of a Pumpkinseed Sunfish was a surprise as this species was not previously known to occur at Buttertubs. Twenty-six Northwestern Salamanders were caught in one small area near the Information Sign. Apart from this, no other animals were found.

"The local Wildlife Branch had suggested that Coho salmon smolts gained access to Buttertubs Marsh via the Millstream in the winter floods and were then unable to

return. As the deeper waters of Buttertubs Marsh were not surveyed, this possibility could not be investigated.

"On July 6th, eight club members, Mary and Ed Barraclough, Flo and Al Clemens, Katherine and Rick Ikona and Anne and Tony Thompson, attempted to identify every plant species seen.

"They examined the status of these plants and discovered that of the 65 species of flowering plants and shrubs, excluding grasses, sedges and trees, 34 were introductions from Eurasia. Considering the fairly recent creation of Buttertubs Marsh as a wetland habitat, this lack of native species was not too surprising. Alien weeds often colonise new habitats quickly and readily out-compete native species. Maybe the future management plans for the marsh will take these facts into account and consider the introduction of suitable native species to the area."

[Ed. Note: For more on the vegetation of *Buttertubs Marsh*, see Appendix V.]

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After Alan Hawryski relinquished his nearly ten-year stint as the Club's first FBCN delegate, Dr. Seiriol Williams replaced him in September 1983. He reported enthusiastically and regularly to the members at club meetings about the activities of the Federation. In the 1985, first edition of the new "Newsletter" he wrote a long article entitled, *Notes on the FBCN*. The following is a condensed version:

Notes on the FBCN (*Seiriol Williams*)

In the relatively short time I have been privileged to be the Nanaimo Field Naturalists representative to the Federation of B.C. Naturalists, I have become conscious of the value to us of our association as a federated Club of this organization.

Why is the Federation important to our Club?

We must not be insular in our thinking. Our association with the Federation brings us into an awareness, appreciation and understanding of the natural environments in our province and the conservation measures necessary to preserve them. Many of you have sent letters to federal and provincial ministers protesting the encroachment and devastation of ecological habitat. We plea for a reasonable measure of action to restore wildlife habitat to its former natural state. We get little if any response and can only hope that some conservation measures will be taken.

However, club directors bring these problems to the monthly meetings of the Federation. After careful consideration, much discussion and sometimes special committees set up to investigate and study the problem, decisions are made. If action is indicated, the united voice of the Federation brings a much more significant impact to our governments. The membership of the Federation consists at the present of thirty province-wide Clubs with a membership of 3,250.

Consider our own regional problems:

The Mittenatch Island bird sanctuary; the Meares Island timber; the attempts to save the Nimpkish giant trees in their primordial forest; the planned coal mine in the Quinsam valley further jeopardising the Campbell River fisheries - already harmed by the wastes of the Western Mines into the Buttle Lake tributary...to name just a few.

FBCN History

The development of the Federation is interesting. I consulted Dr. Bert Brink. He is a well-informed member of the Board and respected and admired by all members for his many contributions. I hope I quote him correctly! ...Sporadic naturalists clubs had been formed and were active in this province before World War I. It was not until after the end of World War II however, that the Okanagan, Vancouver and Victoria naturalists got together and discussed the need to form an organized body that would be provincially-oriented and would encourage the development of other clubs, their communication with each other and participation in one another's activities. In addition, these clubs would form "regions" and would meet regularly in order to become aware of ecological concerns within the region as a whole.

The constitution, by-laws and organization structure of the FBCN to comply with the requirements of the Society Act through the Registrar of Companies, was signed and sealed in Victoria as recently as April 2, 1981. So you see, we are really only just getting started and there is much work to be done in the coming years.

In conclusion, I feel that I should state that I am happy to be your delegate to the monthly and special meetings of the Federation. I only hope I represent you intelligently and that my reports stimulate your awareness. But I realize that my active life span is short. I believe that a younger member of our naturalist group should receive the educational impact of attending the Federation meetings. A younger member would receive valuable experience that could be put to good use by the Club."

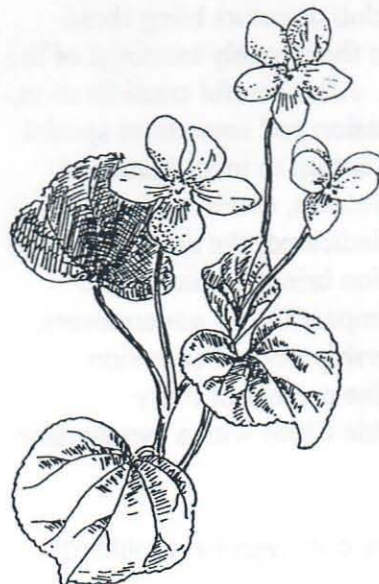
[Editor's note: Dr. Williams died less than a year later, on August 30, 1986. In his Newsletter message, the President said:

"We lost one of our most active and dedicated members with the sudden passing of Seiriol Williams. Seiriol gave his time unselfishly to several community organizations for many years. He had a great love for the out-of-doors and was deeply concerned about preserving wildlife and their natural environment for future generations. Seiriol represented our club at countless meetings of the Federation of B.C. Naturalists and its Vancouver Island Region, and dutifully kept us informed of conservation issues of regional and provincial scope. We shall all greatly miss his enthusiasm, his ideas, and his companionship."

For several months thereafter, the Nanaimo Field Naturalist Club, along with the Horticultural Society and others, worked to have the main trail of the Beach Estates Park named the Seiriol Williams Trail. Not only was he a medical doctor, but he had an avid interest in native plants. Many of the native plants in the Beach Estates wildflower park therefore had come from the Williams' own property. In an article published in the Nanaimo Times dated March 26, 1987 it was said:

"Travelling the newly-named **Seiriol Williams Trail** has been made easier by the Beach Estates Park Wildflower Sanctuary committee. An informative walking map has been posted directly below the park's main entrance, next to St. James Anglican Church [on Departure Bay Road]. The map explains what can be found growing in the park during the year. The main Trail was recently renamed in memory of the late Dr. Williams, who helped spearhead the development of the park. In the next two months, the park will show off snowy white Trilliums nestled among large green Sword Ferns. A 40-foot waterfall is also featured. Trails lead to the beach at Departure Bay."

In an earlier publication, A Guide to Nanaimo's Beaches and Parks (1983), the park was described as "a pretty 5.3 hectare wilderness park. The entrance, a set of steps built into the side of the Northfield Creek ravine, is at the southeast corner of the St James Anglican Church parking lot. The trail follows the ravine to the beach. It is quite steep and muddy in spots, but steps will help you over the roughest parts." Today in 1997, the church parking lot is fenced and easy access to the trail entrance is on the public side of the fence.]



Yellow wood violet

1985-87

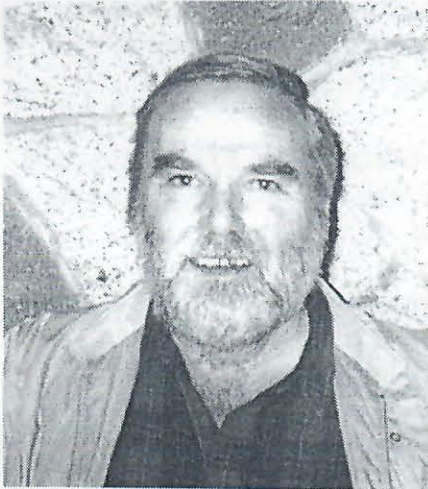
Reflections After Chernobyl:

"This is a local accident!"

- Mikhail A. Timofeyev, Soviet Deputy Minister, 1986.

On Taking The Waters At Chernobyl

"It would really depend on how thirsty you are. I would drink it. (But) I would prefer not to drink it." - Ian McDonald, U.S. Public Health Service, 1986.



Don Blood

Looking back to 1985-87 I remember we had many successful club outings. I especially remember the sea lion cruises. At that time there were few sea lions using the Harmac log booms so we

had to go further afield, down by Porlier Pass from Manana Lodge. I recall sweating with fear on one of the cruises, that we wouldn't see any sea lions at all and our paying clientele would feel cheated. We finally found them, just when it was time to turn back, so everyone was happy.

Environmental attitudes were not quite as good as they are today. In 1986 and '87 developers still reigned supreme: they thought naturalists a bunch of grey-haired birdwatchers whom they could ignore - and usually did. There was little recycling locally; no stream stewardship; no tree bylaws; no Forest Practices Code; no C.O.R.E. and fewer parks than there are today.

Some of the issues the Club was involved with back then were: - support for acquisition of land for the Vancouver Island Marmots in the Haley Lake area; support for the creation of South Moresby Park in the Queen Charlottes; also the Clayoquot Sound issue

which was heating up: input into the Wilderness Advisory Committee - particularly with respect to Strathcona Park; and support for various FBCN issues through our very diligent delegate Seiriol Williams.

We had delegates on two on-going external committees as well: the Buttertubs Marsh Management Committee and the Problem Wildlife Committee. Also 1986 was the year we initiated the annual winter Bald Eagle Count in Nanaimo, which, I am happy to say, continues to the present.

I also recall with great pleasure the many individuals who worked so hard back then to keep the Club ticking along. The Barracloughs, the Clemens', the Ikonas, the van Kerkoerles, the Baillies, Karen Mullen, Kate Hall, Seiriol Williams, Jill Sims, Betty McIsaac, Kim Goldberg and numerous others. Their contributions were invaluable.
Sincerely, "Don"

The new Executive elected in October 1985 included: Mary Barraclough as

Secretary; Al Clemens handled the Treasurer's job; his wife Flo, took care of Membership; and Program was headed up by Rick Ikona with Al Clemens and Steve Baillie assisting. The FBCN Delegate was Seiriol Williams.

According to the Minutes and Newsletters for 1985/86 the following nuggets were recorded:

- ☞ A fork-tailed Storm Petrel was sighted by a jubilant Rick Ikona on the annual club trip to Port Angeles in September 1985.
- ☞ Kim Goldberg re-launched the letterhead logo contest which had originally started in 1972.
- ☞ Frank Stoney who, in his spare time, is an Ecological Reserve Warden, showed his beautiful slides of the Marine Ecological Reserve
- ☞ Joan Edwards saw a Green Heron in the Yorke Lake swamp area on Jan. 23rd.
- ☞ The first Bald Eagle Count was held Jan 18th and 19th for the B.C. Fish and Wildlife Branch. Seiriol Williams covered the Departure Bay area and saw two Eagles. Kate Hall covered from Pipers Lagoon to Lantzville and also saw two Eagles. Peter Van Kerkoerle covered the Nanaimo River Estuary and counted 52 Eagles!

Sealion Cruise

Kanya Baillie had, by February 28, 1986, received 150 phone calls at home from

the general public wishing to reserve their places on the sea lion cruises the Club was hosting on March 1st and 2nd and again on March 8th and 9th of that year. A total of 191 people participated and \$505 was raised as a result of these popular cruises. Kim Goldberg handled the newspaper ads; Don Blood, Al Clemens, Rick Ikona, Bill Merilees, and Peter van Kerkoerle, acted as tour guide/naturalists for each of the eight 3-hour cruises. The club used the docking facilities of the Manana Lodge and Inn of the Sea for the "Clavella", a large yacht owned by the de Boeck family of Magna Yachting Ltd.

The 'handout' which the public participants received on board the *M.V. Clavella*, read in part as follows: "Hello and Welcome to the *M.V. Clavella*. The Nanaimo Field Naturalist Club is pleased to conduct sea lion cruises for the public again. The trip should last about 3 hours. The sea lions are in Northumberland Channel and it will take about 35 minutes to get there. So please sit down and relax and enjoy the view. There are many birds to see on the way such as: Bald Eagle, Great Blue Heron, Common Loon, Western Grebe, Cormorants, Surf Scoter, Bufflehead, Common Goldeneye, Barrow's Goldeneye, Glaucous-winged Gull, and Mew Gull. [There followed detailed descriptions of each bird as well as the California and Stellar Sea lions and the Harbour Seal.]

A newspaper article from the Feb. 27, 1986 issue of *The Times*, said: "They're here again! Large numbers of Stellars and California sea lions are now spending the winter months in local waters. And this weekend is your opportunity to get a closeup of these magnificent animals, hauled out on their favourite rocks and reefs courtesy of the Nanaimo Field Naturalists' annual sea lion cruises. Climb aboard the *MV Clavella* for a three-hour cruise through the sheltered

waters of Thetis, Ruxton and Valdes Islands. Be sure to bring binoculars and cameras to take full advantage of these massive marine mammals and other marine life. Bull sea lions can weigh up to one ton. Members of the Naturalist Club will be on board to provide handouts and commentary about sea lions and the many sea birds which also frequent our Gulf Island waters.

"The Gulf Islands are one of the few areas where both Stellars and California sea lions can be seen together. California sea lions, unrecorded in these waters before 1970, now outnumber the Stellars. Later in the spring both species leave the area for their breeding rookeries. If you don't already know how to distinguish between the two species, you will by the end of the cruise"

.....
\$90 of the \$500 raised from the cruises was set aside for printing 500 copies of the Nanaimo area Bird Checklist. This was the second revision. The original had been printed in the 1970s with the first revision in 1984. By 1986, this latest revised Bird Checklist was being sold for 25c each to non-members but club members, as part of their membership, were allowed one free copy.

[Ed. Note: The Checklist was up-dated for the third time in 1996 and was the biggest and best edition so far. However, the cost (paid for by a non-repayable grant) was more than 5 times that of the one revised ten years earlier for only twice the number: i.e., \$500 for 1000 copies (or 50c per copy).. The executive by 1996 were wiser in dealing with such outrageously inflated costs, so they doubled the selling price to One \$ Loony, netting the Club a projected profit of \$1000. But...in the meantime, Club members no longer get their one free copy!]

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- ☞ By April 1986 Flo Clemens decided it was time to start a Club Scrapbook. She asked everyone to keep an eye out for articles in local newspapers about the Club activities.
- ☞ Also in April the Nanaimo and Arrowsmith clubs decided to exchange speakers. The Ikonas presented a slide show to the Arrowsmith Club on their birding trip to Mexico; a few weeks later, Seffrid Wilson, President of the Arrowsmith club, gave a slide presentation to the Nanaimo club about "A Walk in 'Poldark' Country". It was considered to be a good way to enable members from both clubs to get together.
- ☞ Earlier, in February, Gwen Johnson had taken club members on a hike of the Ladysmith shoreline; and in April the group went with Flo Clemens for a hike along the Northfield Bluffs looking for wildflowers, native plants and birds.
- ☞ April 27th saw several members off on a wildflower adventure with Al Clemens exploring the Nanoose Bluffs for cacti!
- ☞ In April, Seiriol Williams announced that the dedication ceremony opening Nanaimo's first Wildflower Sanctuary would take place at Beach Estate's Park on May 17th at 3 p.m.. Everyone was invited.

The Somass River Delta

The Nanaimo Times in March reported that: "The Nanaimo Field Naturalists were addressed by **Bill and Dorothy van Dieren** of Port Alberni recently.

Their subject concerned the delta of the Somass River, a relatively small area on the western side of the river opposite the Alberni pulp and paper mill.

"Van Dieren described in detail the uniqueness of the delta. It contains some 205 different species of plants - most deltas contain 40 to 60 - and includes 20 rare species, while others seldom exhibit even one.

"To explain why plants normally found in Alaska, the alpine meadows of the Interior and on Vancouver Island's east and west coasts are found on the Somass Delta, van Dieren said that in their studies they found that the delta area consists of six zones of plant communities related to the elevation of the area, from low tide level to the higher elevation supporting Sitka spruce, Douglas fir and Hemlock trees.

"When the glaciers retreated millions of years ago, the upthrust of the land left glacier gravel deposits in the substructure of the delta, which now permits fresh water of the Somass to bring nutrients and oxygen to the plants.

"The tidal influence with its salt water penetrates only the lowest part of the delta and the low sedimentation rate of the Somass is also a factor. The delta, with its climate-related temperature and rainfall, is in the forestry category of a biogeo-climatic zone.

"The land of the delta is owned by MacMillan and Bloedel who may in the future use another part of it for a treatment lagoon which would further disturb the plant life, said van Dieren.

"In the provincial park system, an ecological reserve designation to this area would be "most desirable" to preserve the delta for botanical research and prevent any introduction or removal of its present species of plant life, he said.

"The van Dierens later presented a series of slides which showed the masses of flowers and many closeup views to explain their botanical detail."

In his letter to the Awards Committee of the FBCN, the President, Don Blood, wrote:

"The van Dierens have had a life-long interest in the plants of British Columbia and have travelled widely in the province to broaden their knowledge of our diverse flora. When they moved to Port Alberni in 1979 they began to photograph and then collect plants from the Somass Delta as a hobby. This hobby became a consuming interest which led to the discovery of many plants not believed to occur in the Alberni area and to the realisation that this is one of, if not the most botanically diverse estuaries on the B.C. coast.

"The van Dieren's comprehensive report on vegetation of the Somass River Delta is much more than a plant list. A computer program was used to define nine plant communities, and vegetation zones were related to environmental factors such as the tidal regime, river hydrology, soils, and sedimentation. The professional standards reached in this work provide inspiration to all amateur naturalists. This is certainly the most comprehensive available report on the

ecology of the Somass Delta, making the Somass the best known estuary in B.C. with respect to vegetation. The careful documentation provides an invaluable basis for assessment of future impacts, whatever their cause."

The FBCN agreed that Bill and Dorothy van Dieren deserved the FBCN Recognition Award "*for outstanding contribution to the understanding and appreciation of the natural history of B.C.*" which Don Blood had the privilege of presenting to them at the club's meeting a few months later. [Ed. Note. FBCN recognition awards are only given to members. Therefore, everyone the Club has nominated for an award, has been asked to join our Club in order for the award to be presented. Whether the recipients were asked to pay full membership fees, or just a token - with the Club picking up the FBCN portion of the fee - is not clear from the records. In any case, for a short time, the Van Dierens were members of the NFNC.]

In June, the club took a trip to the Somass River estuary with the van Dierens as their guides to see at first hand the hundreds of native plant species, and especially the 20 rare ones.

☞ In 1986 a federal government fisheries research ship, berthed at the Pacific Biological Station in Nanaimo, was named in honour of one of the club's members, Dr. W.E. Ricker, an eminent Canadian scientist, world renowned for his scientific achievements in fisheries research.

Bird Watching in the Tundra (Vera Riddell)

I had been on several birding trips with Gus Yaki of Nature Travel Service and when I learned that he was making a trip to Churchill I decided to go along. The views from the plane as it approached Churchill were of lakes, pools and bodies of water everywhere. The ice flows in the river appeared blue and sometimes green. One of Churchill's fascinations is that such a barren and harsh country proved so beautiful in detail.

On June 7th we awoke to a blizzard so we spent our morning in the Museum and Visitors Centre. The Museum contains about 4,000 artefacts and interprets Inuit life most artistically. The park interpreter was a woman who had lived in Churchill for more than 30 years. She had many interesting stories to tell - including some of her encounters with polar bears. After lunch the sky cleared, the sun shone and we birded until 10 p.m. at night...in full daylight.

It is fascinating to bird in that environment. Churchill comprises numerous habitats, from the Hudson Bay shoreline with its grey rocky outcrops to shallow ponds and tundra and the open boreal forest. Bogs and muskeg cover most of the flat areas; sometimes it felt like walking on a giant sponge and at others like treading on cornflakes. The plants and trees all seemed to be in miniature. Rhododendrons and Saxifrage were only inches high and the trees all stunted.

To see the birds in their breeding plumage is a wonderful experience:

Turnstones, Black Bellied and Golden Plovers were beautiful, as were the Phalaropes, Chestnut-collared Longspurs and Ptarmigans. In all we saw more than one hundred species. Of course the rarest was the Ross' Gull - one of the world's "glamour" birds - and an endangered species. The first documented successful nesting of a Ross' Gull outside of the Soviet Union, was at Churchill in 1980, although it had been sighted in Canada on several previous occasions. It is to be hoped that this beautiful bird will continue to nest here.

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☞ In October, the Nanaimo Field Naturalists sponsored a no-charge public slide show and presentation of Tim FitzHarris' "B.C. Wild" at Beban Park. This was done at the request of "The Book Store", which also had on hand a number of FitzHarris' books for sale. [Ed. Note: There are no Club records to indicate if any monies raised from that book sale went towards wildlife habitat or precisely why the Naturalists agreed to sponsor this event; it may have been to advertise the Club in an attempt to attract new members, and an opportunity to help 'educate' the general public.]

☞ Election night in October came up with few changes to the executive for the 1986/87 season. It was mainly a matter of musical chairs for the current executive: Steve Baillie stepped forward to fill the vacant Vice President's job. Kanya Baillie relieved Mary Barraclough from Secretarial duties; Mary went on to Publicity. Jill Sims filled the space of FBCN delegate when Seiriol Williams passed away. Karen Mullen was also the FBCN alternate delegate

as well as assisting Katherine Ikona with the Newsletter, which they churned out six times a year. Gwen and Angus Johnson were still holding their weekly "Wednesday Walks" and Rick Ikona continued to "man" his Bird Hotline!

- ☞ At their November 28th meeting, the guest speaker was Wayne Campbell from the Royal B.C. Museum. His topic: "The natural - and un-natural history of Owls".

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After the club's 15th Christmas Bird Count in December, *Peter van Kerkoerle* had this to say:

"We have been discussing the timing of our CBC for years. Because we used to help the Duncan people with their count and they helped us on ours, we had to have them on different days. Duncan was happy with the week before Christmas, so we always took the week after. I had often noticed that the Duncan count was wet, foggy and miserable. Ours would be sunny but often much colder with fresh water frozen and many ducks only to be found on the saltchuck.

"As we have not been asked for the last two years to help out on the Duncan count, we thought to change to the week before Christmas. I am sure most members agree it would have been better if we had kept to the old date. I believe 15" of rain fell that day and it happened to be the heaviest downpour of the season. Everyone went through at least one change of clothes. Steve Baillie's group went home 3 times, put all their clothes in the dryer, and went on after to

put in a full day birding. That's what I call commitment!

"It was surprising how many birds we got: **91 species** and the total number of individuals was 20,443. A good average for our 15-year record."

"Nearly all birds were down in numbers and some common ones were not seen at all. Woodpeckers were absent. Hawks too were scarce; only 2 species were seen. Shorebirds were another shocker. Though we had a boat, thanks to our fisherman member Frank Stoney, and the time spent looking around every rock and island, the shorebirds remained out of sight. But we sure thank Frank for his generosity for supplying the boat and his time."

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- ☞ Steve and Kanya Baillie decided to organize the annual banquet at Beban Park using a caterer. Apparently it was a successful Roast Beef dinner for which 38 members turned out.
- ☞ That night, Kim Goldberg announced that the winner of the Club logo (the Vancouver Island Marmot) was Ken Langelier whose brother-in-law, artist Vic Marcetti, drew the final version of the design now used on the Club's stationery. It had taken members exactly 15 years to come up with this logo - having first been asked to think of something back in 1972! It took Kim Goldberg a whole year and much "urging" for this goal to finally be achieved.
- ☞ In the spring of that year, Steve Baillie led a trip to the Englishman River estuary for birding and to

French Creek to see the giant Cow Parsnip. They saw lots of birds but were far too early in the season to see the Cow Parsnip in bloom.

[Editor's Note: In Vol 2.#1 edition of the Arrowsmith Naturalist Newsletter (Feb.1997), an article by Maxine Lott on this subject states: "In the carrot family there is a huge plant called the Cow Parsnip. It grows on river banks and in marshy areas. There is a large stand of it in French Creek estuary where it can be seen in the summer from the bridge. It happens to be photo-toxic. Exposure to the sun after touching it results in a painful burn and the formation of blisters.

"Dr. Julia Levy, research scientist at UBC observed this phenomenon when her small boy was affected years ago. For the past twelve years she has been doing research to adapt the procedure medically. Finally her fortitude is paying off and her research staff of 50 is treating patients with a variety of afflictions, including early cancers, psoriasis and age related loss of vision. Results have been encouraging so far, but new methods require a great deal of positive successes before final acceptance."]

In May, Jill Sims reported to members on the FBCN's annual general meeting held in Courtenay that year. One item of particular interest was the FBCN's desire to see clubs compile a nature calendar for their respective areas, with notes for each month. Very quickly a "Calendar Committee" was formed in the Nanaimo Club comprised of Jill Sims, Ken Langelier, and Kanya Baillie.

Kanya had long been an avid collector of calendars - of all types - and she suggested that instead of a one-time calendar, the club should publish a Perpetual Calendar. Jill took care of the shore birds and marine life as well as dozens of other details; Ken Langelier handled the "artistic" contacts and Kanya

looked after another dozen or so details. The three met regularly and often for the next several months in Dr. Ken Langelier's office. When the calendar was finished, a non-repayable grant from the Wilderness Intelligence Leisure Development Society took care of the cost of publishing it. It quickly became a very popular item for many of the clubs on Vancouver Island, and in 1989, the Nanaimo Field Naturalists received the Federation of B.C. Naturalists Nature Observation Award.

[Editor's Note: It was fitting that Jill Sims, one of the three people who worked on preparing and producing the Calendar, was at the FBCN's AGM to receive the Award, a cheque in the amount of \$200.00, on behalf of the Club. She turned it over to the Executive at the following regular Club meeting. Unfortunately there was no permanent Certificate which the Club might have kept in its Scrapbook as a pleasant reminder of this achievement.]

Notes From The Galapagos (Joan Edwards)

Many of us, I believe, share the experience of being more appreciative of our own country after visiting another. This in no way detracted from a recent trip to the Galapagos Islands, situated 600 miles west of Ecuador.

The Archipelago is an Ecuadorian national park; all native animals, reptiles and birds on it are protected. Apart from humans, their greatest threat is from introduced domestic animals such as goats, rats, dogs, pigs and cats which were left there to run wild. There is an on-going program to control and rid the Islands of such animals.

Because of their natural state there were no predators, and the life-forms there make no effort therefore to get away when approached by humans. One has to step over baby sea lion pups left by their mothers safely above high tide. A female Booby goes right on feeding her fluffy chick just feet away. The Iguanas stare back at you, while a Mocking bird continues to sit on her nest just inches from the trail. If a male Frigate Bird has his impressive red pouch inflated to attract a nearby female, it makes no difference if two dozen humans pass by.

It is this situation that Park regulations were set up to protect. The rules are **No Touching and Keep To The Trails**. And, no one goes ashore without a Park naturalist along. They are courteous, well informed and firm. The one exception to the "No Touching" rule was at the Darwin Research Station. In one of the Tortoise pens a huge one came across to where I was standing (in the shade - it was 130 F). The attendant had demonstrated their appreciation at having their throats scratched, so, when it stopped at my feet, I obliged. I suppose if they could purr, this one would have.

We visited different islands, the ship usually getting underway very early in the morning. For instance, after our first shore walk the afternoon of our boarding, we found ourselves the following day 70 miles south on Hood Island. While each island has its specific life forms to examine, for example, the famous Darwin Finches, there were also species common to all, such as sea lions, crabs etc.

We saw locusts, lizards, marine and land iguanas, Red-footed, Blue-footed and

Masked Boobies, sea lions, plus one colony of Fur Sea lions; there are no seals. We saw Galapagos doves, Finches (specific to each island), Mocking birds, Galapagos Plovers, Ruddy Turnstones, Vermilion Flycatchers, one female Heron, Yellow Warblers, Northern Phalaropes (migratory), and a pair of ducks.

We saw Lava Gulls and the Swallow-tailed Gull which hunts at night and has a white spot on its beak so the young know when food is at hand. We saw one small Penguin, Pelicans and the Black Finch which feeds on cactus seeds. I thought the two most exciting sights were a lagoon full of Flamingos in mating plumage, and the amazing variety of sea life brought into view while snorkelling.

There were not many insects, but there must be some as we saw spider webs. Other life-forms I did not see were the Flightless Cormorants, the Galapagos Hawk, probably only on uninhabited islands, and the waved Albatross, which are all at sea at this time of year. There is also a non-poisonous snake common to most islands which grows to about four feet in length.

We visited a white beach, a black beach, a sand-coloured one where we heard some local history full of courage, passion, jealousy and possibly murder - and a red beach where we swam with the sea lions - a fun-loving lot. I found the tidal pools strangely bare, but not surprising, as these islands only up-heaved themselves about 10,000 years ago and everything has to float or fly in.

I was impressed by the efforts to preserve what is there, and thought of our own "Galapagos", the Queen

Charlottes, their infinite variety of life and colour, and the need to protect them from further degradation.”

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[For a while, a regular column appeared in the 1986/87 newsletters written by Dr. Ken Langelier, on the treatment of injured wildlife. The following is one such article]:

Wildlife Treatment Report (Ken Langelier DVM)

This summer we had the opportunity to work once again with injured Bald Eagles. Two of the three birds presented had bad wing fractures after being shot. It always horrifies me to think that for every one that is shot and presented to our veterinary hospital, there are probably 10 or more that are never reported and left to die of their wounds in an isolated area. This year, a mature male Bald Eagle came from the Ladysmith area. The wing was badly fractured and gangrenous and required complete amputation. I debated on simply euthanizing it but decided it would be a good educational tool to denounce shooting of Bald Eagles.

Shortly after the amputation, I was contacted by the Television DANGER BAY productions to use “Larry” as he was now called. Shown in 33 countries and 17 languages, this TV program depicts a veterinarian working out of the Vancouver Aquarium. This episode will be about the illegal hunting of Bald Eagles. So, as an education tool, Larry will be quite a hit. All proceeds Larry makes from his television debut will be going to the Western Wildlife Refuge and the Morrell Wildlife Sanctuary

Society in Nanaimo for wildlife rehabilitation.

The other Eagle that was shot came from Qualicum and had an open fracture of a few days standing. Although surgical pinning repaired the fracture, a large callus that formed around the fracture is preventing proper flight. The third Bald Eagle, from Galiano Island, had complete loss of vision in one eye and was unable to hunt. It is planned to use these two birds in a breeding program as several facilities are having luck breeding Bald Eagles in captivity.

I had the opportunity to assist Andrew Bryant this summer with his work on the Vancouver Island Marmot. Although his study focuses primarily on their genetics, much field work is being laid that will allow close study of their numbers. With the controversy over their numbers, I am glad to see that the animals will be monitored so a more definite idea can be had about how this unique species is doing.

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- ☞ In November (shortly after the above article appeared), Dr. Langelier gave a talk at the Club’s regular meeting on the Rehabilitative Medicine of Wildlife.
- ☞ On Oct 24th and 31st, the Club offered two birding courses through Malaspina College. The first was on birds of the Ocean and Estuaries; the second was on birds of Marsh and Field. Course leaders were Kim Goldberg, Don Blood, Rick Ikona and Steve Baillie. Don Blood taught the identification part of the courses; Kim Goldberg taught “tools of the

trade" (binoculars, field guides etc); Rick Ikona and Steve Baillie presented the slides and discussed the best places to go birding.

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Wednesday Walkers

(Gwen Johnston)

Our walking group now numbers over 20 with an average attendance of about 14. During the summer [of 1987] we visited a number of nearby islands: Newcastle, Protection, Gabriola and Thetis. In May we were fortunate to have Mrs. Inez Weston of the Cowichan club to take us to Mt. Tzouhalem nature reserve. It was a beautiful sight to see with a view of the valley and slopes covered with wildflowers. A patch of Balsam Root was a surprise as we thought it to be a flower of the interior. Also, a small red pea bloom was pointed out as being quite a rare plant.

A trip to the Cobble Hill Herb Farm proved to be a pleasant experience and we learned about many kinds of herbs and their uses. There is a gift shop there at which we bought a variety of herb products, dried flowers and seeds for planting.

Recently, we enjoyed a walk through Yellow Point Park and through another trail which continues on from Barney Road and ends near the Yellow Point Lodge. We enjoyed a delicious lunch at the lodge and admired the new building. It was pleasant to walk around the grounds on such a lovely fall day.

[Ed. Note: The Lodge had burned to the ground the year before. It was rebuilt in 1987. Only the huge stone fireplace in the lounge remained from the old building.]

Our next trip on October 28th will be to Stzuminus Park, formerly Ivy Green, where we will have a tour of the park and learn about native uses of plants and trees. Hopefully we will see salmon in Bush Creek.

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A cause for celebration in 1987 was that the final boundaries of the **Pacific Rim National Park** were finally put in place and included what was described as "the spectacular Nitinat Triangle" inland from the West Coast Trail. Ottawa and the Province of B.C. bought out timber rights to the tune of \$50 million. B.C. then transferred the land to the Federal government as the final stage of the original 1970 federal-provincial agreement which created this national park in the first place. The park contains three distinct areas: **Long Beach**, between Tofino and Ucluelet; the **Broken Islands** and surrounding waters in Barkley Sound; and the **West Coast Trail** between Bamfield and Port Renfrew.

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Before closing this segment of 1987, a few words should be said about the **Clayoquot Sound** problem which Don Blood mentioned in his letter at the beginning of this section.

Since the 1980s, and possibly even long before, this whole area had been the focus of intense public debate. The controversy centred around the issues of old growth forest wilderness, protection of ecosystems, and large scale forestry operations. The debates resulted in angry confrontations and civil disobedience which lasted more than ten years.

In its land use decision report the B.C. Government described Clayoquot Sound in these words:

"Clayoquot Sound is located on the west coast of Vancouver Island. The Sound is a large area of islands, ocean, fjords, narrows, estuaries, mudflats, rocky shores, sand beaches, mountains, forests, lakes and streams. It is roughly 350,000 hectares in size.

"The Clayoquot is a spectacular part of coastal British Columbia, a region renowned for its beauty. The Sound supports a wide range of resources: a huge volume of old growth timber; fisheries that are important for local lifestyles, cultures and economy; concentrations of metallic and industrial minerals; magnificent scenic resources for tourism and an unusual combination of marine, freshwater and land ecosystems.

"Clayoquot Sound lies on a complex mixture of volcanic and sedimentary rocks. The rocks of the Estevan Coastal Plain, roughly Hesquiat Peninsula, Vargas Island and Esowista Peninsula, are relatively recent (under 200 million years old). East of the Plain they are up to 360 million years old. The older rocks are cut by intrusions of granitic rock. In places, the heat and pressure of these intrusions converted some of the surrounding area to metamorphic rock. Most of the known mineral concentrations in Clayoquot Sound are associated with these granitic intrusions or with past volcanic activity.

"One of the features of Clayoquot Sound is a number of narrow passages with fast tidal currents such as Hayden Passage

between Flores and Obstruction Islands, and large expanses of mudflats and shallow banks.

"The narrow ocean passages are rich in marine species, including some rarely found elsewhere in B.C. The nearly 860 hectares of eelgrass beds associated with the mudflats and shallow banks, form the largest cover of eelgrass along the west coast of Vancouver Island.

"The mudflats and estuaries near Tofino are one of nine coastal wetlands in B.C. identified as critical for waterfowl and shorebirds migrating along the Pacific flyway. With well over 100,000 birds using the area, it is one of the most important habitats in B.C.

"Most of the land area of Clayoquot Sound is covered by forests which are typical of the very wet Coastal Western Hemlock forest zone. These forests are characterized by western hemlock, western red cedar, yellow cedar, balsam, salal, Alaskan blueberry, deer fern, lanky moss and step moss. At higher elevations, they are replaced by Mountain Hemlock forests and parkland, and, still higher, by Alpine Tundra.

"These forests are part of the North American temperate rain forest, which flanks the mountainous coast from Alaska south to the Oregon-California border. Here, land and sea strongly influence each other. Coastal rain and fog promote the vigorous growth of temperate rain forests on the land, which in turn provide nutrients for the waters of the coast and continental shelf.

"Nine of Clayoquot Sound's primary watersheds of 1000 hectares are essentially natural. *A primary watershed is a drainage basin that drains directly to the sea.* Six of them, the Megin, Moyeha, Watta, Sydney, Ice and Cecillia, together form the largest continuous block of natural primary watersheds on Vancouver Island."

In 1993 the B.C. Government announced that timber harvesting in the Clayoquot Sound area had been reduced from 81% to 45%. This however still allowed the forest companies to harvest 600,000 cubic metres of timber per year from this area.

The land within the protected areas in Clayoquot Sound was increased from 39,100 hectares to 87,600 hectares - or from 15% to 33% of the area, as follows:

Megin Watershed - the largest intact watershed on Vancouver Island - now completely protected from headwaters to ocean. Combined with Strathcona Park, this has created one of the largest areas of protected old growth rainforest on the west coast of North America.

Upper Shelter Inlet - contains a scenic fjord and significant old growth rainforest.

Sydney Inlet - Protects one of the best examples of a coastal fjord as well as the Sydney River estuary.

Outer Coastal Areas - includes Hesquiat Peninsula and the historic west coast telegraph trail, as well as the strips of coastal areas only of Flores Island and Vargas Island.

Clayoquot Arm/Clayoquot Lake - protects lake and river in the lower Clayoquot valley; includes major salmon spawning habitat and Sitka spruce rainforest. This area will provide canoeing, hiking and wildlife viewing.

Clayoquot Plateau - has unique limestone features including caves and sink holes and containing 29 rare plant species.

Other Protected Areas include Dunlap and Morfee islands, Dawley Passage and Lane Islet, Kennedy River Bog, Kennedy Lake, Tranquil Creek headwaters and Hesquiat Lake.



1987-1989

No Problem At The Current Time

"As the environment is not part of the free trade agreement, there are no major studies on various specific issues because there are no issues we are aware of at the current time.- Dr. G. Sainte-Marie, DM, Environment Canada, 1988.

A Sticky Point

"For me to start musing out loud philosophically about environment -related questions of a very general sort that have nothing to do with my mandate..."- Tom McMillan, Minister, Environment Canada. 1988.



Steve Baillie

In 1982 I joined the Nanaimo Field Naturalists but didn't get actively involved on the executive until 1985. In 1987 I succeeded Don Blood. What did

I hope to achieve as the Club's ninth President? Several things: improving the trail at Buttertubs Marsh; initiating and completing a year-long study of the flora and fauna of the Nanaimo River Estuary; to get more members participating on the Executive - and on outings. And, I wanted to improve communication to the members from outside the club, such as information from the FBCN and other organizations which could be related to the membership at meetings.

So what did we achieve? The Perpetual Nature Calendar was published, but that was a project started during Don Blood's term. We did manage to get over \$1500. in grants to improve the Buttertubs Marsh trail. This was one project that did succeed, with the provincial Ministry of Environment taking a lead role. Nothing much was done to the Nanaimo River Estuary, but it is still one of my favourite areas for walks.

One of the major issues that arose during my term was an attempt to extend Pryde Avenue along the

dyke that splits Buttertubs Marsh. A number of groups, including ours approached City Council on this subject to have it stopped.

I was pleased to witness the beginnings of the greening of industry. Recycled paper was becoming commercially available. Labels were appearing, describing contents as environmentally friendly. "Think globally and act locally" was the catch phrase of the day.

Political attitudes however, were bemused at best. The 'extremist' environmentalists, like Greenpeace and the Sea Shepherd Society, were around to bug the politicians, but we couldn't really identify with them. We were listened to politely, but ineffectually. Nevertheless, we could see that slowly changes were coming as 'green' politics cautiously became a movement.

Like all presidents, I certainly didn't work alone. I appreciated the help of Rick and Katherine Ikona, Jill Sims, Eleanor

Routley and Rina Samson; and the continuous efforts of Karen Mullen, Peter and Anneke, and especially Kanya, who was always supportive and helpful.
Sincerely, "S.Baillie"

The new Executive for 1987 was straining for lack of support. There were few people to do the work of many:

President	Steve Baillie
Vice-Pres.	vacant
Secretary	vacant
Treasurer	vacant
Membership	Katherine Ikona
Program	Kim Goldberg Steve Baillie
Publicity	Mary Barraclough
Newsletter	Karen Mullen
mailing	Jill Sims
FBCN delegates	Karen Mullen Jill Sims

A Road Through Buttertubs Marsh?

This shocking question was raised in the October newsletter, and the commentary which followed, read: "It has just been learned that a road has been proposed to run through Buttertubs Marsh. This road, the extension of Pryde Avenue, is supposed to be located on the existing dike, thus dividing the Marsh in two. *This must not be allowed to happen!* To prevent this tragedy, our club president, along with other concerned groups in the area, will be making representations to City Council on November 30th. If you can, please come to this meeting for we need all the support we can get. You may also phone or write to our aldermen. Mayor Frank Ney, Aldermen Lloyd Sherry and Pat Barron all support our view, but the rest need more information before they will vote to remove this development from the community plan.

Please call any of the following to express your concern: Gary Korpan, Larry McNabb, Bill Holdom, Owen Kennedy etc. Our club members are not normally "activists" but in this case, the issue is just too important to ignore."

[Ed. note: Obviously this plea, and the arguments presented, did work. Council voted with the environmentalists against the Pryde Avenue extension through the Marsh.]

- ☞ Another cause for celebration that year, was that BCers finally chose their provincial bird - the Stellar's Jay. The vote took place at a time when few individuals knew that 1987 was apparently the *centennial* of wildlife conservation in Canada.....[hmmm!]
- ☞ Talking about birds, Jill Sims wrote an article in the newsletter about her first CBC experience:

Christmas Bird Count

(Jill Sims)

This was my first Christmas Bird Count. I had heard that last year's was a disaster - but this year the weather co-operated! Four of us on 'Marbella' had a most rewarding day - on smooth water.

A Red-throated Loon was cruising around the floats as we cast off in Nanaimo Harbour. Two minutes later Rick [Ikona] was yelling and pointing, "Three Rhinoceros Auklets". And that's the way it went on. Ducks, cormorants, etc were in small groups, or just 2s and 3s for the first while as we cruised past Newcastle, and Pipers'. We disturbed a fine Eagle and some Seals on Entrance Island. But from there in - sometime around noon - the count was incredible.

I'm not even mentioning the Glaucous-winged Gulls but when the Five Fingers

rocks came in sight, there were literally thousands of cormorants - Pelagic and Brandt's - each rock looking like a giant pincushion.

Across the harbour to the Gabriola bluffs we counted like crazy and by the time we reached False Narrows, there were Eagles on every tree. If we had been counting mammals as well it would have been a job for 10 people! We cut through herds of sea lions, both species. Trying to identify a duck, one would suddenly zero in on a sea lion's teeth! Seals were looking scornful, lying on log-booms in the afternoon light. We saw Otters too, on Snake Island, and again near Harmac. Soaring Eagles in the thermals were in great numbers.

The light was beginning to fade and gulls were on the move when we came in sight of a vast raft of Western Grebes swimming into the harbour. Frantic counting again. I haven't seen so many grebes since the morning after typhoon 'Freda' hit Vancouver in '62! Without Frank Stoney and his boat I would have missed all this good fortune. The details of course will be in the Club's count records, but for me, it was an unforgettable experience.

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- ☞ The mall stall in November netted the club \$241.95 in merchandise sales, \$75. in raffle tickets, and a \$50. prize for the best decorated stall!
- ☞ *[Ed. Note: No doubt the prize was won for the Club's unusual handmade banner.]*

☞ Karen Mullen noted in her report about the Fall 1987 general meeting of the FBCN that the Nimpkish Big Trees were finally getting positive attention. Nimpkish Island was being secured from erosion and there were plans for a walkway and Interpretation Centre to be built. She said: "These trees are about 300 years old with the tallest measuring 317 feet. This stand of old growth Douglas Fir is actively growing, and are not a climax forest like Cathedral Grove."

☞ [Ed. Note: By May of the following year, the Big Trees of Nimpkish Island were finally set aside as an Ecological Reserve.]

☞ The club received a letter from the Canadian Wildlife Service (sent to all Island clubs) asking for assistance in locating heronries. The letter said that heron eggs collected in 1986 from the colony near Crofton contained dioxins. In the spring of 1987 *sixty* pairs of herons nested in the colony and although they produced the normal complement of eggs, no young birds fledged.

.....
In early 1988, Steve Baillie's President's message contained the following sharp reminder about how *unhelpful* our species can be in attempting to help mother nature! He wrote...

"Sometimes in our enthusiasm to help nature, we make mistakes and actually do more harm than good. For years a farmer in Nanoose had been feeding the eagles which frequent his farm, but this year something went horribly wrong. The eagles that were feeding on the cow carcass he had provided were becoming sick and falling from the trees in which they were perched. Through the efforts of Robin Campbell of the North Island

Wildlife Recovery Association [NIWRA] and Dr. Ken Langelier and many volunteers (including several from our club), 29 sick eagles were found. 24 survived. The eagles had been affected by the drug that was used to kill the cow.

If the farmer had been advised that, or had tried to find out if, the drug used to kill his cow would have adverse effects on birds, perhaps this tragedy would have been avoided."

.....

To follow up on this message, Ken Langelier provided readers with his...

...Wildlife Treatment Report (Ken Langelier DVM)

A total of 29 Bald Eagles suffering from the effects of ingested barbiturate were discovered by volunteers of the North Island Wildlife Recovery Association and presented for treatment. Of these birds, three were found dead and two died shortly after transport to the veterinary hospital.

The 24 remaining eagles required veterinary attention to clean out their crops of the poisoned meat, given intravenous fluids, heart and lung stimulants, and close monitoring. Blood samples were taken and the birds were provided with hot water bottles as they lose their ability to regulate their body temperatures while under the effects of this drug.

As the eagles' livers metabolized the drug and eliminated it from their bodies, the birds began to wake up. The total sleep time was variable depending on how much barbiturate had gotten into their blood stream. Some birds slept as short a time as a few hours while others

slept for four days. All treated eagles eventually recovered from the drug and after waking were given activated charcoal by mouth to absorb any further drug in their intestinal tract. Antibiotics, B vitamins and iron were also given and in a very short while all birds were eating well on their own. Four eagles which had suffered the worst were kept a week longer to be sure they would not suffer any long-term effects from the drug. All 24 eagles were eventually released.

Measurements of the bill depth at the cere and length of the Hallux claw revealed that only 7 out of the 29 eagles were females. Why this is so is unclear. Also of interest is of the birds that died, only one was an immature bird, the other four were adult. The immature that had died had suffocated on crop contents. Twenty-three of the 24 released eagles were banded to hopefully provide us with more information in the future.”

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The President of the Arrowsmith naturalists, Pauline Tranfield, wrote a letter to the Nanaimo Field Naturalists to ask for support in the fight against development of the Englishman River flats. This fight would occupy the populations of the Parksville/ Qualicum area, the Vancouver Island Region of the FBCN, and everyone involved in the “Friends of the Flats Coalition” for several years before an acceptable solution was found. In 1992, the Nature Trust and the B.C. Government purchased 64 hectares of the “Flats” for a total price of \$2,763,000. The Nanaimo Field Naturalists put up \$500. of this money.

On February 13th and 14th, 20th and 21st the Club again sponsored 3-hour sea lion cruises aboard the *Clavella* with

Kanya Baillie again taking dozens of phone calls from the general public wanting to book their seats. The following article appeared in the local newspaper, The Daily Free Press, by staff writer Lynn Welburn:

Wings and Flippers Close Up (Lynn Welburn)

When asked to go on a sea lion cruise sponsored by the Nanaimo Field Naturalists, I wasn't too sure what to expect. We were promised Bald Eagles and Sea lions and I figured, sure, a few birds and a couple of smelly sea mammals - just give me a good zoo anytime.

The Naturalists run these sea lion cruises every spring on the *Clavella*, a boat well-known for its spectacular whale cruises off northern Vancouver Island every summer. There are only a few sea lion cruises offered however, and reservations are practically mandatory as seating is limited.

Once underway, I soon had a change of mind. By the cliffs of Gabriola Island we saw our first eagles. At first there were only a few of these majestic birds swooping down from their lofty Cedar perches to fish in the waters of the shoreline. Suddenly those on board were galvanized by the sight of so many white-headed eagles perched on the branches of these towering trees, which appeared decorated with shining white baubles. “This is awesome” one passenger commented. “Everyone should see this”. [Ed.note: According to Rick Ikona, an official count was made and it was determined that over 1,000 eagles were seen in the area that day.]

So far we had seen only a few California and Steller's sea lions but the raucous barking indicated there were more

nearby. Then they came into sight. There on the log booms of Harmac were dozens - no hundreds - of sea lions of all sizes, shapes and in many shades of brown, blending nicely with the logs on which they lay. They barked greetings to us and seemed neither aggressive nor frightened by our ever-nearing boat.. "I knew there were lots of sea lions in the area but I never thought I'd see so many at once" observed another passenger. "This is thrilling and the whole trip has been just terrific".

The sea lions were circled by hundreds of gulls and eagles taking advantage of the sea lions' eating habits. As the sea lions catch and eat fish, remnants of flesh float to the surface to be greedily gobbled up by the birds. We always knew when a sea lion had made a catch because the birds would suddenly go wild and converge on that spot in the water, fighting for their share of fish scraps.

As we all ran from one end of the vessel to the other, pointing and shouting to each other about what we were seeing, cameras clicking madly and binoculars being focused first on one of the huge mammals, then on another, I wondered what these animals thought of us!

.....

- ☞ In March members enjoyed a day exploring the treed park of Cathedral Grove and lunch at Cameron Lake. At their regular meeting that month Knut Atkinson of the Ministry of Environment spoke about Wolves and Cougar.
- ☞ The Club took on the task of erecting Bluebird boxes on the Ladysmith bluffs. Steve wrote: "One of the joys of Harold Pollock's life is bluebirds. It wasn't surprising therefore, when I

asked him if he could help us with a bluebird nest box project he replied, "Certainly. When?" Since retiring, Harold has built and nailed up bluebird boxes all around Vancouver Island. All of his efforts have been rewarded and if the population returns to anywhere near historic levels, it will be due to this man's untiring crusade."

- ☞ Jill Sims reported highlights from the Vancouver Island FBCN regional meeting held in Saltspring Island in March. One of the things she noted was: "...a proposal to create a park containing the lower part of the Tsitika River which runs into Robson Bight has been endorsed by Vancouver Island communities. The shore at Robson Bight is already a preserved area (Orca rubbing beach). The federal government had suggested it should be named "a natural site of national significance" or a "Canadian Landmark". A Swiss suggestion gave it "World Heritage Status".
- ☞ A pleasant event for Club members was at their May meeting when FBCN Recognition Awards were presented to Dr. Ken Langelier and to Robin Campbell [NIWRA]. The Club had nominated both men for their untiring efforts to save wildlife. Ken Langelier received a soapstone carving of a Killer Whale and Campbell was presented with a soapstone carving of an Owl.
- ☞ To celebrate Environment Day in June the Nanaimo and Comox-Strathcona club members got together for a picnic and day-long walk around Buttertubs Marsh and Morrell Sanctuary.

Wednesday Walking Group Trips

(Gwen Johnston)

The first walk of 1988 on January 8th took us to Jack Point. We had hoped to see sea lions, but were only able to hear them on the far shore. Finding Pussy Willow in bloom made us feel Spring was indeed on the way. Other January walks took us to Diamond area in Ladysmith, Saltair and Bowen Park.

Colliers Dam in winter dress with the trees, ferns and Oregon Grape lightly dusted with snow and the sun shining on a slight glaze of ice on the water was a photographer's delight....alas! something went wrong with the camera.

A very rainy day found the hardiest of the group following the newly constructed heritage path at Ladysmith's waterfront from the Rotary boat basin to Transfer beach. One interesting feature along the way was an old weigh scale used in the coal mining days, unearthed many years later.

With Spring weather comes trips to see the Lilies...the first at Piper's Lagoon, then the Nanaimo River Embankment and Morden Mine. Another new walk is the Dodds Narrows Nature Trail reached by taking Holdon-Corso Road and turning left on to White Road. It will be a good place to see Spring wildflowers.

- ☞ A new provincial park was established on Gabriola Island - "Sandwell Park" during 1988. In July several members enjoyed a wildflower trip to Mount Washington; and a few weeks later, drove down the Island to visit another newly created provincial park: Botanical Beach Park.

- ☞ In August they examined more Bluebird boxes on Saltspring; and went on an alpine wildflower expedition to Mt. Arrowsmith.

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In his Fall 1988 message, the President said: "The past year has been a lot of fun...and a lot of work. We operated without a vice-president, secretary or treasurer. The current executive shared all of the duties and never complained. I couldn't have asked for a better supporting cast."

It was true. The 6-member executive did the job that just 5 years earlier 12 people had done. Steve had almost run a "one-man show", handling the jobs of President, Treasurer and Program. Katherine Ikona acted as Secretary while carrying on with her Membership duties. Eleanor Routley and Rina Samson responded to his appeal for help and took up the duties of Treasurer and Membership in October 1988. Jill Sims and Karen Mullen continued with the publication and mailing of the Newsletter (still being produced every 2 months), as well as attending countless regional, general and conservation meetings of the FBCN - then writing them up for the Newsletter!

The Club's delegates right from the days of Seiriol Williams did a good job of informing the membership of all that went on at these FBCN meetings: - a host of environmental problems province-wide which the FBCN was actively involved in; and reports from its various committees. After the meetings, delegates often went on field trips and these too were included in their reports published in the club's Newsletters. One such field trip in 1988, written by Karen Mullen, went like this:

"Not all of the Annual General Meeting was hard work, meetings and reports. On Friday evening we attended a wine and cheese party followed by a slide show on the varied landscapes of the Chilcotin/Cariboo area. An excellent banquet on Saturday night was followed by guest speaker author and park naturalist Richard Wright who gave a hilarious, but thoughtful talk. He had his audience rolling in the aisles at his anecdotes, yet he also touched on the need for conservation and wilderness experience.

"Our wilderness experience came the next day. I travelled in a van with 13 other eager naturalists of varying backgrounds. We stopped at all the nature spots we had passed on the journey to the AGM. First was a tour of Scout Island - an excellent birding area. Next came 150 Mile Ponds, a scenic series of small ponds and rolling hills. We hiked all over looking at waterfowl, song birds and 4 eggs in a Killdeer nest (a great photo op. but the mother wasn't too happy about our intrusion!) The area was mostly grassland used by cattle, but there were plenty of small wildflowers everywhere...and you had to be careful where you sat because cacti lurked in abundance.

"Other motorists must have wondered about this van-load of people making frequent stops to charge off into the bush with binoculars and cameras flying. The ultimate had to be near Lytton. After our lunch, our group suddenly went running across the highway and up the hillside to look at white anemones and other wildflowers. The other restaurant patrons must have wondered at seeing our group crawling around the ground after our meal, and hoping they hadn't eaten the same thing! There certainly are

many happy memories and wonderful people to meet on a weekend such as this."

- ☞ The year ended with a trip to the North Island Wildlife Rehabilitation Association in Errington to adopt an injured Great Blue Heron. It cost the club \$300.00 for a one-year adoption. The Heron died.

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Lead Shot

"The recovery of the Trumpeter Swan from its endangered status, is a success story", Steve wrote in 1989. "But there is another danger lying at the bottom of ponds, estuaries and other waterways that threatens to destroy them. In order to aid digestion, Swans and other waterfowl ingest small stones into their gizzard. This muscular organ uses the stones to grind vegetation into pulp, much like our molars. Instead of small stones, however, these birds take in lead pellets from shotgun shells which are lying at the bottom. Ground up in the gizzard, the lead enters the body and slowly poisons the bird's system. Swans are dying now. They will continue to die because of lead pellets already in the environment. This we cannot change. We can prevent more lead from entering the environment by banning the use of the pellets and promoting the use of an alternative such as steel. The Wildlife Veterinary Report has started a Petition calling on the Canadian Government to ban the use of lead shot."

[Ed. Note: This Petition was spearheaded by Dr. Ken Langelier. By October of 1989, several other groups had joined in. In the end, 14,000 people signed the Petition which was presented to the MLAs (for onward presentation to the Minister of Environment), by our Club's Rene and Gordon McLean, the North Island Wildlife Recovery Association, the SPCA, the Fish and Game Club, and of course, Ken Langelier.

Nanaimo was the first to adopt the ban; it was extended to all of the east coast of Vancouver Island from Campbell River south. Later, lead shot was banned in the Lower Mainland and in areas where 10% of the gizzards contained lead shot or a significant die-off occurred. Finally, the government banned lead shot throughout the entire province of British Columbia. Lead shot is now also banned in several other provinces.]

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In 1989 oil was washing up on the shores of our Island's west coast. Karen Mullen and other club members got busy writing letters to provincial and federal officials to protest the lack of adequate response to the spill. These letters were copied and made available to Dr. David Strangway, Chairman of BC's Task Force on the Environment and Economy.

The Rt. Hon. John Turner replied to Karen's letter: "I appreciate the circumstances which prompted you to write. As the Member of Parliament for Vancouver Quadra, I too am concerned about the environmental impact of oil washing ashore along Vancouver Island. While the effects of the spill are still being evaluated, all indications are that the oil will severely damage a priceless national asset."

MLA, Dale Lovick said: "875,000 litres is not very large for an oil spill...there have been bigger. But you will recall that we were told by Premier Vander Zalm shortly after the accident that everything was under control and the damage had been contained. Today, more than three weeks after the collision between the barge and the tug, we learn that the oil has made it as far north as the Queen Charlotte Islands. The newly created preserve on South Moresby is now threatened."

An NDP press release said: "Premier Vander Zalm's refusal to say no to offshore oil drilling, despite the ecological damage created by the recent west coast oil spill, indicates how far removed he is from the environmental concerns of BCers. The premier has admitted that both the provincial and federal governments are poorly prepared for oil spills. On the other hand he has asserted that we have the technology to permit offshore drilling with no environmental risk!. Wishful thinking by Premier Vander Zalm won't protect our environment."

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- ☞ Club members played host to the Vancouver Naturalists who came over to explore Nanoose Hill when the wildflowers were at their best.
- ☞ There were plans to join the Nanaimo Paddlers for an outing in mid-May.
- ☞ Kanya Baillie took over Table Sales from Mary Barraclough. These table sales were held at such annual events as the 'Mall Stall' (Woodgrove), the Sea Lion Festival, Earth Day, and Environment Day. [Ed Note: The many, many volunteers who help with table sales each year, raised approximately \$500 annually between 1989 and 1996 for the Club's special projects.]
- ☞ The June BBQ was held at Bill and June Merilees' home...it was a chance for members to see their famous 'backyard habitat'.
- ☞ It was about this time that the book *Attracting Backyard Wildlife* by Bill Merilees, was published. He turned over the royalties, from the sale in

- ☞ B.C. of this popular book, to the FBCN for disbursement to all clubs for their wildlife projects. [Ed. Note: *The FBCN unexpectedly, and inexplicably imposed a deadline for applications for this money. The Nanaimo Club's application (for \$250.) must have missed that deadline by a wide margin, for it didn't even receive a response! Finally, after several attempts to get a reply, the money was received- in 1997!*]

In 1989, Nanaimo was not a happy city. An American company was working hard to convince all and sundry that it would be good for the area to have a ferrochromium plant built at Duke Point.

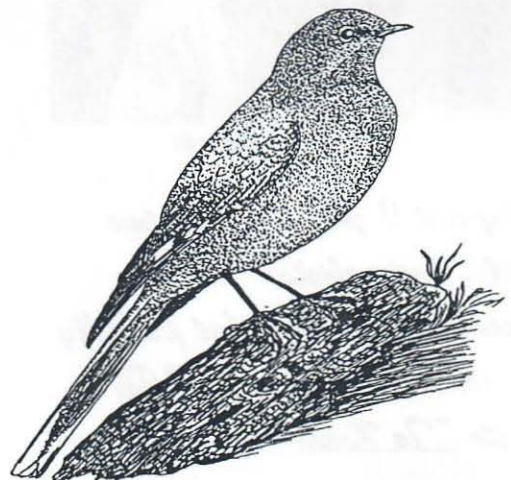
Ferrochromium is an alloy element used in the production of stainless steel. What worried the townspeople was the carbon dioxide, nitrogen oxides, sulphur dioxides and particulate emissions that they and their children might well end up breathing or drinking.

Although the company, Sherwood, did a slick public relations job, bringing in 'scholarly' officials in an attempt to *prove* that these emissions would not impact significantly on air or water quality...it didn't work! It was made clear by the citizenry that this plant would never be welcome in Nanaimo's backyard. Nanaimo Field Naturalists were among the hundreds who wrote letters to councillors, newspaper editors and city administrators and voiced their opinions at a large public hearing. And in the end, the people won.

- ☞ In September, members were fortunate to have Ian and Sally Wilson as guest speakers. They presented a multi-projector slide presentation entitled "*Wild and*

Free...Living with Wildlife in Canada's North". It included mountain climbing with goats, petting porcupines, wading through marshes with moose, and close encounters with burly black bears. With spectacular slides they described the habits and habitats of such animals as elk, bear, wolves, moose, shorebirds, and small mammals. The presentation was a culmination of their adventures over several years living in the north.

- ☞ In October members had a great time at Pachena Beach and travelling (only a few miles!) on the West Coast Trail. Apparently conditions varied from disgusting to not bad.
- ☞ The following Saturday, Larry Henson lead an intrepid group on a strenuous hike to Step Creek - which runs into Haslam Creek - to observe a 100 foot high waterfall and some interesting geology. Apparently the hike, which involved about 3 Kms. of bushwhacking and three steep slopes, was worth every bit of effort!



1990

On It All Being A Matter Of Degree, Really

"Myself, I've always been an environmentalist. As a matter of fact, probably to the point where a lot of people thought I was too much of a fusspot."

- Bill Vander Zalm, B.C. Premier, 1989

On Trendiness And The Greenhouse Effect

"Acid rain has been #1 on the charts for a while, but it may be replaced because global warming is such a sexy issue."

-Lois Corbett, Ecological Action

Centre, 1990



Joan Edwards

Why did I join the Nanaimo Field Naturalists? Many reasons, I suspect, but probably the philosophy in our FBN motto "To Know the Outdoors -

And to Keep It Worth

Knowing". I grew up in West Vancouver mostly before the 1st Narrows Bridge was constructed. This gave us all the mountains above to range in - Hollyburn Ridge, and Black Mountain above Horseshoe Bay and beyond. Friends and I thought nothing of a Saturday afternoon walk to Pt. Atkinson Lighthouse along the then unused rail bed. The Keeper of the lighthouse would let us spiral up to the glorious prisms that focused the light far out to sea. Little did we know what a bridge across the narrows was going to do to our wide-flung domain. An early memory was my indignation at seeing a For Sale sign nailed to a beautiful Douglas Fir. "How could anyone buy or sell a tree?" I thought. When one is very young a tree is a fixture.

I cannot now remember my introduction to the Nanaimo Field Naturalists, but am sure it was through one of its excellent programs. I have an enormous respect for the knowledgeable members of the Club and the

speakers they have presented. The programs add to one's knowledge; the field trips give us unforgettable experiences; the organization provides a channel through which we can ask for curbs on environmental destruction.

During my one short year as President we had a world renowned Ichthyologist come to one of our meetings. He provided factual material so that we could address the Kemano Completion Project and write letters to our MPs to ask that the lowering of levels in the Nechako River not proceed... and because of public outcry, the second phase of that project was cancelled.

In my experience, if a person takes some action, even when it feels like canoeing up a waterfall, things do get achieved because others may too take action, adding their strength to one's own.

I am thankful for organizations such as ours that have dedicated members who "know the outdoors" and who go down to the wire to "keep it worth knowing".

In closing, I want to mention one highlight of my year I will never forget. It was after our Annual Banquet at Yellowpoint Lodge at which our guest speaker's topic was Blue Herons. Early one morning about a month later, it was thrilling to have a squadron of thirteen fly past my home. I have not since seen so many herons at one time in this area.

Sincerely, "Joan"

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After Steve Baillie's term as President ended, no one seemed ready to take on the job in October 1989. For the next two meetings (November and January), the President's chair was filled on a rotational basis. In February 1990, however, Joan Edwards stepped forward, saying: "This won't do!" and offered herself as President. A collective sigh of relief was heard throughout the club as the membership, so very grateful that she had volunteered, enthusiastically endorsed her Presidency.

The Executive had one new face: Arpa Robinson who volunteered to be Secretary - a job which had not been done for a full year. The other members were: Eleanor Routley (Treasurer), Rina Samson (Membership), Program directors Kim Goldberg, Anneke Van Kerkoerle and Larry Henson; Karen Mullen and Jill Sims continued as Conservation and FBCN delegates, and Steve Baillie took over the publication of the Newsletter. At last the Club had a full Executive.

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In November '89, Larry Henson, who was a mountain climber and ardent hiker, once again lead a group on a "strenuous" hike into Carmanah. A year earlier, he had led a group there and someone on that excursion had written about it in the Club's newsletter:

Carmanah

(Anonymous)

On October 23rd [1988] nine people met on the Island Highway near the Cassidy Airport. It was 7 a.m. and we were on our way to Carmanah. As dawn progressed we could see overcast skies, low cloud on the mountains, and fog in the Cowichan River valley. The pavement ended at the BC Forest Products Heather Campsite at the west end of Cowichan Lake. The clouds were now drizzling and the autumn coloured trees were dripping large drops on all who stood beneath them.

At the sign to Bamfield we turned left heading toward Nitinat Village. The Nitinat River valley was aglow with fall colours in the early morning light. On the Caycuse River bridge we stopped to look for spawning salmon. A hard right at the end of the bridge put us on our way again [on Rosander Main]. We climbed above Nitinat Lake and followed the road in a southerly direction, winding along past Cheewhat Lake. We continued on the most used road to Bonilla Main. At this junction we kept left through the open gate to arrive at the Carmanah Creek trailhead. We had travelled a distance of about 160 kms from Cassidy Airport - about half of this on loose surface logging roads.

We passed under the log marked Carmanah Trail and began our muddy wet walk through the forest. When the trail started downward, the level of mud

deepened. As we reached the valley floor we regrouped at the down-creek/up-creek trail junction. We followed the up-creek trail to our first stop at the "Fallen Giant". This is a large windfall stretched out on the ground. We climbed up onto this huge tree at its "top" end which measured 60cm (2ft) in diameter, and walked along the full length of the trunk to its root where the diameter had widened to 3 meters (nearly 10 feet).

Continuing up stream, we followed the sign to what was termed "Big Spruce". This tree was 3 1/2 meters across. Its size appeared awesome as we walked up to it. It was not, however, the biggest tree we would see.

We stopped for lunch on a gravel bar in the creek bed. The drizzle continued but because of the constant shower of drips from the big trees, we found it more comfortable to sit out in the open.

After lunch we continued on the up-valley path. Our next side trip was to see the biggest tree in the upstream part of the valley trail. The short walk took us to look at a giant spruce said to be 14 feet across (4.2 meters). Its circumference was 43 feet. It stands tall and straight with its head lost in the mist above. It was easy to arrange eight people side by side in front of this tree for picture taking.

We stopped at a hollow tree. Some of the group squeezed inside and used flashlights to probe the innards. Automatic cameras succumbed to the frequent use of flash and dampness so few, if any, pictures were taken of people crawling in and out of this tree. The trail continued up the valley with so many large trees coming into view. It

seemed that everywhere we looked there were huge trees. One tree has been measured at 265 feet in height and is so marked by a sign at the trail edge.

Group members were so saturated with seeing big trees that they were beginning to treat new marvels as ho-hum. In spite of this, appropriate exclamations issued forth when a bend in the trail revealed a group of three closely spaced trees each of which was no less than 10 feet in diameter. [Known as 'The Three Sisters'] We continued on to the trail end.

On the way back the trail seemed muddier. We found a sign indicating a new trail to the road. We followed the white and pink ribbons through the bush along the valley floor hoping it would be an easier trail to the top. It was not! The new trail had about the same steepness as the old trail but it had not been cleaned out and there were many slippery downfalls to climb over. The rain increased and we got wetter. There were ropes along the way to help us up the steeper parts of the trail and over the downfalls.

At the roadway we had about another 10-minute walk through more mud back to the trailhead and our cars. Everyone peeled off rain gear and muddy boots and changed into dry clothes, socks and shoes for the long ride home.

[Ed.Note: In 1990 the lower Carmanah Valley was declared a provincial park and the Walbran and upper Carmanah Valley were added in 1995. It was named the Carmanah Walbran Provincial Park. The gravel surface, boardwalks with handrails and steps in the steeper areas, make for far superior hiking trails today to those travelled on by the group in the above story. But the road to Carmanah is still very, very rough, especially the last 30-40 Kms. Among the various bird species in the park are Pygmy Owl and Marbled Murrelet.]

Later in November 1989 Larry Henson led an "easy" hike to Lone Tree Mountain. Their meeting point was at Eaton's Woodgrove parking lot. Then in December he took the group on a "moderate" hike to Ammonite Falls on Benson Creek. Thus ended 1989.

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The Inner Route was the major topic for discussion during this period, with Club members attending several public meetings and open houses held at Fairview Elementary, Coast Bastion, Bowen Park, Mt. Benson and Georgia Avenue schools.

A new Island Highway, and whether an Outer Bypass or an Inner Route would be best for Nanaimo, had been an extremely controversial and highly charged issue for more than 10 years. Finally, in 1990, a Municipal Liaison Committee was formed to study the question and make its recommendations to the City. The terms of reference for this Committee were very restrictive indeed, and did not address any consideration of the merits (or otherwise) of an Outer Route. The Ministry of Transportation and Highways (MOTH) had already made its decision. It was to be the Inner Route - or nothing. An Outer Bypass would never be considered seriously until Island traffic warranted it.

For the Naturalists the fact that an environmental impact study had not apparently been carried out was of major concern. The provincial Ministry of Environment seemed conspicuous by its absence both as consultant to the Committee and at the public hearings. Probably what most alarmed the Naturalists in 1989, however, was

MOTH's plan that the Inner Route have an alignment parallel to Wakesiah Avenue, through NDSS property, and running along side Jinglepot and Buttertubs marshes, which would potentially encroach on both.

The Committee's recommendations included most emphatically that no traffic signals be used in order to allow traffic to move freely through the City. For the naturalists, it wasn't the stop-and-go traffic that concerned them as much as the worry that signal lights would bring with them strip mall development, impacting further on what natural areas were left intact.

The final recommendations of the Municipal Liaison Committee did emphasize "grade separation" rather than signal lights; that the Inner Route remain a "controlled access facility" - i.e. zoning to protect it from strip mall development; and finally, that specific measures be taken to protect Buttertubs Marsh. The Committee had done its work; it could do no more and was dissolved.

In the next three or four years the Nanaimo Field Naturalists would express their concerns and work with the Highway authorities to minimize the potential damage to unique areas which the Inner Route would otherwise cause.

[Ed. Note: Further details are recorded beginning on page 119.]

Riefel Bird Sanctuary (Steve Baillie)

On January 28th, Rick and Katherine Ikona and I caught the 7 a.m. ferry for Vancouver. We were hoping to see a **Smew**. This Asian merganser had appeared in Langley in late December

and had been counted in their Christmas Bird Count.

According to the Bird Hotline, the Smew was last seen on a pond near 28th and 192nd. Scanning the pond produced only a few Bufflehead - at first. Then we saw a streak of white flying in. Could it be? YES it was! A Smew! A beautiful male in snowy white plumage with a black mask. Along with this rare duck (4th recorded appearance in BC), were about a dozen Hooded Mergansers (ho hum).

We stopped at some fields near Boundary Bay to scan the gull flocks for some Glaucous Gulls that were reported. Unfortunately the winds were so strong that we stood at the same angles as our tripod legs. We ate lunch in the car waiting for the sudden downpour to be blown away by the fierce winds. By my second mug of tea the storm was in Powell River, and we drove off to Riefel.

At Riefel we were shown where a Northern Saw-whet Owl and a Long-eared Owl could be found. In between we saw Black-crowned Night Herons, Canvasback and more American Wigeon than I have ever seen on one body of water. We had been directed to a particular Cedar tree near the trail for the Long-eared Owl. We looked and looked and looked. Finally Katherine spotted it out on a low limb, not at all near the trunk where it should have been!

☞ The Club Banquet was held for the first time at the lovely Yellowpoint Lodge (thanks to Mary Barraclough). Ian Moul from the Canadian Wildlife Service was guest speaker. His topic: "Great Blue Heron Colony of Crofton".

- ☞ In February, the Club Newsletter was printed on recycled paper for the first time.
- ☞ The Nanaimo Field Naturalist's annual sea lion cruises were suspended in 1989. By February 1990, the sea lions had decided that the log booms at Harmac were ideal for haulout. Tourism Nanaimo, Harmac and the Pacific Biological Station therefore launched the first sea lion "festival". Free tours on board the *Bastion City* and Scenic Ferries took sightseers out along the log booms to see these large marine animals up close. On land, there was plenty of music and entertainment as well as lots of "nature" displays by wildlife experts from Morrell Sanctuary, the Nanaimo Field Naturalists and the Pacific Biological Station. This annual "festival" lasted until 1996; then the sea lions left Harmac for other areas more to their liking.
- ☞ Club members went in search of migrating whales, flowers and birds at Long Beach; some even booked into nearby inns and stayed to enjoy that April long weekend.
- ☞ April also took them back on their annual trek to see the wildflowers at Skutz Falls.
- ☞ The Club's annual Mother's Day walk included the Wildflower Reserve at Honeymoon Bay once again.
- ☞ Graham Gillespie led a "bunch of birders" to the Cowichan Estuary to look for shorebirds, warblers and osprey.

- ☞ The BBQ was held at Rina Samson's farm in Cedar..where members took a few hours to inventory her property of native plants and animals, before the hamburgers were cooked and served.

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Earlier that Spring, the Club secretary, Arpa Robinson, had written to the Ministry of Transportation and Highways, and to the City of Nanaimo. The first letter dealt with the cutting of a hedge and wild roses on Jinglepot Road (3700 block). In their response, MOTH said:

"Thank you for your letter re the cutting of wild roses and brush on the right of way. The Island Highway Services area manager and I met on site and agreed not to cut the brush from Pearson Bridge to the City boundary sign. However, the grass will be cut up to the Wild Roses and Brush. The Do Not Cut order was just in time as the brushing machine was in the area and could have easily cut the Roses before we reached them. I trust we have met with your concerns and have contributed in some small way to preservation."

The second letter was in regard to insecticide spraying of the trees in Bowen Park and was reprinted in the Nanaimo Free Press. It was titled:

Let Birds Get Insects

"(To Andy Laidlaw, Director of Parks). It has been noted that some trees in Bowen Park are at present infested with insects, and that a spraying program will soon be carried out by the City. However, we wish to remind you that spraying with insecticide will kill our bird population, so may we suggest that the trees be left in their natural state, and the birds will take care of the insects.

Spraying at this time will cause more damage than just getting rid of insects. Our wild birds are a treasure and we would like to preserve them. Would you please reconsider this action and save our trees...and our birds."

Mr. Laidlaw replied: *"This department carries out a minimal insecticidal spraying program on a demand basis annually. It is generally confined to ornamental trees and is specifically targeted at the tent caterpillar population. If the tent caterpillars were left unchecked, damage to the investment we have in trees in Bowen Park would be substantial. The Department has no plans for overall spraying of trees, as most of the vegetation is of the coniferous variety. Our staff are sensitive to environmental concerns and the ecosystem of Bowen Park and only intervene as a method of maintaining a balance within the park."*

- ☛ Morrell Sanctuary invited the Naturalists along with several other groups, to set up a booth on their property to help celebrate Environment Week in June. Shaw Cable televised the event for all Nanaimo to enjoy.

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The Nanaimo Field Naturalists nominated three distinguished citizens for the provincial Environmental Award. All three received a Certificate of Appreciation from the Minister of Environment, "for exemplary efforts to preserve and enhance British Columbia's environment.

The three were: Mr. William van Dieren for his recognition of the uniqueness of the Somass Delta and his perseverance to have it protected; Dr. Ken Langelier for his continual efforts to protect and preserve wildlife; and Mr. Merv

Wilkinson, for his lifelong work (50 years) of educating the public on effective selective logging methods used on his 136 acre "Wildwood" forest at Yellowpoint.

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Sailing, Sailing, O'er the Bounding Main!

(Anonymous)

In late summer, a group of naturalists sailed out to sea on a pelagic birding trip on the Canadian Princess charters out of Ucluelet. The boat moved slowly out beyond the 30-mile limit where land could no longer be seen. It was a gloomy day, the ocean and sky blending together in the same dull, dark grey. It was difficult to tell where the one ended and the other began. The vessel heaved and rolled on the sea's heavy swells. The passengers felt it must be similar to being inside a round grey ball rolling, rolling, up and down and from side to side in relentless motion.

As the ship rose to the top of each huge swell, and rolled to the bottom of the next, Rick and Steve sat huddled together on the bow deck in the cold grey mist, straining to see through their clammy binoculars, focusing alternately on sea, then sky, then sea again. What birds did they observe? Who cared! Their companions, with heads rolling in their arms, were 'down below' suffering from the *malade de mer*!

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Joan Edwards signed off her year as President with these few last words of wisdom: *"It [October] is the season for cobwebs and interesting spider activity. Like black hornets, spiders are one of our best pesticides!"*

1990-1992

On The Question of How Much Attention Environmentalists Possibly Deserve.

"I'm really fed up with the ridiculous claims of some of the environmentalists which invariably and always receive far more attention than they could possibly deserve." - A. Zimmerman, *Noranda Forests*, 1990



Graham Gillespie

My term as president, which followed a term as vice-president, was sandwiched between Joan Edwards and Bill Merilees.

Much of the time was spent trying to further establish the Club's presence in a community, wrapped in an atmosphere of increased political sensitivity to the role of naturalist organizations.

Nanaimo was, and still is, suffering from evolving beyond the development-driven city councils of recent decades, into a more rational and transparent process of decision-making. The defeat of the proposed ferrochromium plant just prior to my tenure had opened doors for input from the community in general, and naturalist groups were sought out and listened to as a matter of course.

Not being a particularly political-minded person, I was not fully comfortable trying to respond for such a diverse group as the Nanaimo Field Naturalists. My professional background (a B.Sc. in Zoology) was in fisheries, and I was an adequate birder, so my contribution lay in gathering and preserving information from the Christmas Bird Counts, January

Eagle counts and the Buttertub's Marsh surveys which we completed during those years.

The latter was one significant contribution which Steve Baillie, Rick Ikona and myself carried out. We surveyed the Marsh on a weekly basis for one year, collecting data on the abundance of resident species, and recording a few rarities - Ash-throated Flycatcher and a breeding pair of Northern Orioles!

Perhaps my favourite Club accomplishment during this period was the Purple Martin project. Bill Merilees spent a weekend cutting cedar boards into bird house parts, and we enlisted the support of the First Rock City Scout Troop to build specially-designed, Starling-proof, Purple Martin houses which we installed around the Nanaimo River Estuary. The project was a raging success, attracting one pair of Martins the same summer they were installed.

As is always the case, most of the significant events during the period in which I was President were the direct result of the dedicated members of the Executive: The Baillies, Elthea Dale, Darlene Gillespie, Joan Greenhorn, Kate Hall, Rick Ikona, Gwen Johnston, Gordon and Rene McLean, Bill Merilees, Karen Mullen, Arpa Robinson, Rina Samson, Jill Sims and Jean and Sid Vivian. My thanks to them all. Sincerely, "Graham".

The new Executive for 1990 consisted of:

President	Graham Gillespie,
Vice-President	Bill Merilees
Past President	Joan Edwards
Recording Sec.	Arpa Robinson
Corresp. Secs.	Jean and Sid Vivian
Treasurer	Darlene Gillespie
Membership	Rina Samson
Program (Speaker)	vacant
Program (Activity)	Graham Gillespie Rick Ikona
Newsletter Cttee	Steve Baillie Rene and Gordon McLean
Publicity	Kate Hall
FBCN Directors	Karen Mullen Jill Sims
Table sales	Kanya Baillie
Mid-Week Walk	Gwen Johnston

This was one of the largest Executives ever, even with one vacancy, which wasn't filled until February 1992.

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In November 1990, with the whole-hearted support and approval of the club membership, Bill Merilees organized a new Buttertubs Management Committee comprised of the Nanaimo Field

Naturalists, MoE and the City of Nanaimo to co-manage the Marsh. A few months later an article appeared in the Times newspaper:

“Field Naturalists Search for Balance at Buttertubs..

“What kinds of wildlife and human activity can co-exist in Buttertubs Marsh? That’s the focus of the Nanaimo Field Naturalists’ Club as it works on a plan to manage the marsh. Members of the club are working to inventory bird, reptile, plant, fish and other life forms.

‘A management plan has to look well beyond inventory’, says Bill Merilees, club vice-president. ‘Some people want to let their dogs run loose; some kids want to run their dirt bikes in the area; and when people walk around the marsh they encroach on other people’s private fence lines’, he said. ‘Those are the kinds of issues we have to look at if we are going to manage the area for both plant and animal life as well as for people.’

The Plan will look at the future of the Marsh, including such issues as water levels, what kinds of trees might be planted, and where, and expansion of the protected area.”

☞ 1990 ended in the usual way, with the Christmas Bird Count. Peter Van Kerkoerle made the following interesting observations: “A new bird to the Count was the White-throated Sparrow on Neil Bourne’s feeder. Good thing that it showed up. It had been a daily visitor for several weeks. Too bad their Anna’s Hummingbird was not seen this year. You know, that Anna’s Hummingbird had been seen

there for 16 consecutive years. We sure missed it this year.”

During 1991, Graham Gillespie and his team recommended several changes to the Club’s meeting structure. The meetings had been held on Friday evenings since the early 1970s. But, because the President had another commitment for Friday evenings, the meeting night now had to be changed. The only time a room was available to the Club at Beban Park was on Wednesday.

The format of the meetings was changed as well. In order to accommodate the occasional out-of-town speaker, and because a regular monthly dance group started their loud music next door to the club’s meeting room at 8:30, the executive decided that it would be preferable to have the program first, at 7:30pm, followed by a coffee break before the business portion of the meeting commenced.

[One unforeseen result of this change, was a reduced number of members attending to the business affairs of the Club because so many left directly after coffee.]

The reading of the Minutes were dispensed with as well, as this took up too much valuable time. Instead, the Minutes were to be printed in the Newsletter so that members unable to attend the meetings, could now keep up to date with Club business.

The other change made to the Club’s meetings, was Members Night. It was moved from May to September.

The Club's fee structure was also revised when the executive decided to drop the Seniors category and instead have one fee for Family and one for Single memberships only. The fees were then increased to \$21. and \$15. respectively.

At this point the executive realised it was necessary to let members know that if they didn't renew their membership by the end of February each year, their name would be removed from both the Membership and Newsletter Mailing lists. The Club had for years "carried" defaulting members, providing them with the Newsletter and paying the FBCN dues on their behalf for as much as two years..a practice which made little economic sense.

The Executive also made a decision, with the membership's approval, to publish a Membership List annually in the Newsletter.

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- ☞ The guest speaker for their 1991 Annual Banquet that year was Sid Cannings, the President of the FBCN.
- ☞ The Newsletter editor in January asked members to think about whether they wanted "automatic" membership in the FBCN or if they would prefer a *choice* in the matter. The FBCN had, without warning, raised its rate from \$4.00 per membership to \$10.00! *[Club members didn't vote on this question at that time.]*

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The Vancouver Island Region of the FBCN held a Round Table discussion on Shoreline Habitat and Adjacent Wetlands from Campbell River to Jordan River.

The purpose of the Round Table was to discuss ways of protecting areas in danger of being lost because the proper authorities might not have been aware of them. The Nanaimo Field Naturalists were responsible for the area between Nanoose Bay to Saltair. They needed their members to be on the alert for such things as Bald Eagle nesting and roosting trees; where herring spawn; where gulls gather to feed, bathe and drink; what beaches were favoured as spawning grounds for Midshipmen [a type of fish]; and information on rare or localized plants, and so on.

Invited to the Round Table discussions, were government officials, and representatives from Western Canada Wilderness Committee, the Nature Trust of B.C., and Fish and Game Associations.

Forty-six important areas were eventually identified. Nanaimo listed the Shack Islands, Hudson Rocks, Gabriola Cliffs, Dodd's Narrows and Pylades Park. In Parksville/Qualicum the Arrowsmith group identified Qualicum Beach, Columbia Beach, Parksville Bay, Englishman River, Rath Trevor Beach and Nanoose Hill. All of the other Clubs on the Island formed similar lists to provide to the other participants of the Round Table and municipal, regional and provincial officials.

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- ☞ During March, the Nanaimo Field Naturalists were officially recognized by Nature Trust as Wardens of the Buttertubs Marsh trails.
- ☞ The first annual Brant Festival was held in Parksville-Qualicum on April 12th, 13th and 14th to celebrate their arrival. These small geese fly

thousands of miles non-stop to reach the rich coastal feeding grounds of the Parksville-Qualicum area.

- ☞ On Pitch-In Day in May, several members picked up bags and bags of garbage from Piper's Lagoon. They enjoyed hot coffee and other refreshments afterwards at the nearby home of Rene and Gordon McLean.
- ☞ During the last weekend of July, a few members of the club enjoyed two days on Mt. Washington, at a cost of \$60.00 each. They rented a cabin and brought along their food, binoculars, hiking boots and bird and plant books for a "naturalists' holiday".

Karen Mullen reported on the FBCN's Planning meeting held earlier in the year. She said: "The discussion covered the four objectives of the Federation:

- A:** To provide naturalists and natural history clubs with a unified voice on conservation and environmental issues;
- B:** To foster an awareness, appreciation and understanding of our natural environment that it may be wisely used and maintained for future generations;
- C:** To encourage the formation of and cooperation among natural history clubs with similar aims and objectives to the FBCN throughout the province;
- D:** To provide a means of communication among naturalists in B.C."

"What it boils down to", she said, "is that money is needed to hire people to run the FBCN more efficiently and effectively. More volunteers are required to shift some of the workload off the small core group. Better public relations is needed;

and policies need to be compiled and updated."

- ☞ In August, Graham led members on a Newcastle Island walk. They brought with them a beach seine net to see what they could find at low tide. Also that summer, he led them on a pleasant outing to Sidney Spit Marine park located east of the Saanich Peninsula to look for fallow deer, and shoreline birds.
- ☞ Other members that summer gathered at the south east corner of Gabriola Island for a family picnic in Drumbeag provincial park.

Sally Goldes of the **Rowbotham Lake** Preservation Society was guest speaker at the Club's October meeting. She spoke about the need to have the Lake and its adjoining area designated as a 'pocket wilderness area'. She explained: "Rowbotham Lake is roughly 15 km southwest of Coombs. The site is accessed by travelling about 9 km past the Fletcher Challenge gate at the west end of Grafton Rd. One then proceeds along a 2 km trail to the lake (elevation 1,000 meters). The entire site is roughly 1,000 acres and includes two access trails, the lake, and its viewscape overlooking the Englishman River and vistas westward.

"It is a spectacular wilderness site which contains both old growth and virgin sub-alpine forest habitat. It is also an area that provides excellent opportunities for wilderness experiences, including viewing wildlife, fishing, camping, swimming and panoramic views."

- ☞ On December 26th, The Club sadly lost Angus Johnston after a long illness. Throughout the coming months several donations were made by individual club members, and the Club on behalf of all its members, to the Nature Trust of B.C. in his memory.

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The Club's 20th Christmas Bird Count rounded out the year. Twenty-eight club members counted 112 species and more than 25,000 individuals. Unusual sightings included the Savannah Sparrow, a Black Duck, a Western Sandpiper and a Barn Owl.

Now, about that Barn Owl. Peter Van Kerkoerle wrote: "At 4 a.m. Steve Baillie jumped out of bed and raced to Quennell Lake to be at a farm there before the farmer opened his barn at 5 a.m. Why? To get us a new species, the Barn Owl. That is what I call an early bird or "birder". Thanks Steve. I just cannot get up that early!"

- ☞ The speaker at the Annual Banquet at Yellowpoint Lodge in January 1992 was Mr. Stan Orchard - a well known authority on amphibians and reptiles (frogs, lizards and snakes!).
- ☞ Joan Greenhorn took over Membership from Rina Samson around this time; and Elthea Dale filled the vacant Program (speakers) slot, and also that of Secretary.
- ☞ The FBCN Vancouver Island Regional meeting at the end of February, began with a panel discussion on issues specific to Vancouver Island. The panel members included Wayne Campbell of the Daily Free Press, Cedar area

director Frank Garnish, and Nanaimo Alderman, Bill Holdom. The issues concerning the naturalists were:

- a. municipal and regional responsibility for environmentally sensitive areas; b. how to generate support for proposals; and c. better understanding of the role of the media.

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Graham Gillespie approached the 1st Rock City Scout Troop to help him with a project of building nest boxes for the Purple Martin. On March 21, 1992, the following article appeared in the Nanaimo Times:

"The Nanaimo Field Naturalists Club and the 1st Rock City Scout Troop are launching a nest box program for the purple martin. Populations of this, the largest swallow in North America, have been declining in B.C. Their former range included the lower Fraser Valley and southeastern Vancouver Island from Sooke to Campbell River. The only remaining three colonies are found in Esquimalt Harbour, the Cowichan River estuary and Ladysmith Harbour.

"The purple martin is about the size and shape of a starling, but is glossy purple and has a short, black bill and forked tail. Martins fly like swallows, with short wing beats and long, swooping glides. In recent years, local naturalists have seen these martins in Nanaimo about once a year, during fall migration.

"Possible reasons for the decline of purple martin populations on Vancouver Island are loss of suitable nesting sites, and competition with introduced European starlings. Martins require old woodpecker holes in trees in the immediate vicinity of open water.

Increased shoreline development with the clearing of dead trees which were suitable martin nesting sites, may be preventing them from staying in the Nanaimo area. By placing nest boxes in appropriate areas, the hope is the martins will be persuaded to re-establish breeding colonies in Nanaimo.

"The project began with the construction of nest boxes specially designed to attract martins, complete with doors designed to keep out the less desirable starlings. The boxes will be placed on disused pilings in the Nanaimo River estuary below the south end of Haliburton Street. If successful, the project may be expanded to other areas of Nanaimo."

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- ☞ For five days in April, lucky club members joined Bill Merilees on a Wildflower Extravaganza trip through the Columbia Gorge in Washington State.
 - ☞ Later in the month, others joined Bill on "the Notch" in Nanoose for more wildflower viewing and to install Bluebird nesting boxes there.
 - ☞ A group of about 15 people joined Graham on a low tide beach seine at the Biological Station at the end of May. Among the diverse sea life in this nearshore area, they caught gunnels, crabs, perch and shrimp.
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During the month of June, members of the club boarded a chartered boat - *The Bonnie Belle* - in Campbell River and sailed off for a day-long visit to Mitlenatch Island in the Strait of Georgia. In the Sept/Oct 1988 issue of *Birder's World*, a volunteer

guide/warden, John Gordon, had written about Mitlenatch. The following is a somewhat condensed version but describes well what club members experienced on their visit in 1992:

Mitlenatch Island

(John Gordon)

Situated just a few miles off the southern tip of Quadra Island, Mitlenatch is not only one of the largest seabird colonies in B.C., but also an extremely important nesting site for the Glaucous-winged Gull.

Every spring thousands of seabirds converge on Mitlenatch Island. Glaucous-winged Gulls, Pelagic Cormorants and Pigeon Guillemots being the most common. However, a considerable number of other birds use the Island to rest on their way north and south. In a sense, they use Mitlenatch as a land bridge on their migration runs.

What makes this internationally known Island so interesting and unusual is its unique climate. One major factor in this unusual ecology is the lack of rainfall. The rocky outcrop is ten miles from the nearest landmass and receives less than 29 inches of rainfall per annum compared with nearby Campbell River which gets twice that amount. The result is a near desert-like classification. Because Vancouver Island's rainshadow extends over Mitlenatch, any moisture in the form of rain from the Pacific is first deposited on the surrounding 8,000 foot mountains. Any remaining moisture warms and dries by the time it crosses the Strait of Georgia to reach the Island.

Combining its geographical position and climatic influences, the island is blessed with a rich myriad of flora and fauna. These include some of B.C.'s many

endangered plant species, including Water- Starwort and Quillwort, as well as the most northerly [coastal] location of the Prickly pear Cactus and a number of other plants normally found in alpine areas.

At the end of the last century, Mitlenatch was owned by the Manson family. They kept cattle there until 1920 and sheep until 1950, despite there being no regular fresh water on the island - a mystery for historians. In 1960 the provincial government purchased Mitlenatch from the Manson Estate for \$5,000.

[Ed. Note: Year after year John Manson invited the teachers, nurses, doctors and other missionaries from Alert Bay, Village Island, Knights Inlet etc, to spend their holidays at his Sunnybrae farm on Cortes Island, to help with the sowing and harvesting of the farm. In return, each received a two-week holiday with free room and board, and fresh produce to take back with them - and Mr. Manson got free, honest labour.]

Among those who took advantage of this working holiday during the depression years of the 1930s, was the Gillard family. Rev. G.L. Gillard assisted Manson each year to transport the sheep with the aid of the United Church Missionary vessel The Sky Pilot to and from Mitlenatch. Water was also regularly transported to the island. The sheep and lambs many of which stayed year 'round, were kept in a corral with a shelter nearby. The only predator on the island was the occasional eagle in early spring which might try to nab a very small lamb.]

Mitlenatch is of major importance because of its breeding colonies of 4000 Glaucous-winged Gulls, 600 Pigeon Guillemots and 1000 [sic!] Pelagic Cormorants. Black Oystercatchers, Northwestern Crows, Barn Swallows and Song Sparrows make up the other nesting species. The trail system has been set up to guide visitors away from delicate nesting areas. It runs through

meadows and along rocky outcrops to Northwest Bay where the beach allows observation of a wide variety of flora and fauna.

Its wildflowers are another reason to visit this unusual island. In the spring white fawn-lily and chocolate lilies mingle with common monkey-flowers and blue camas. In [summer] the woolly sunflower, gumweed, harebell and the beautiful harvest brodiaea are present. A favourite for visitors is the prickly pear cactus. Mitlenatch is one of the most northerly [coastal] locations of these beautiful plants that reach a height of 5 inches and produce a delicate yellow flower which lasts only a few hours before turning purple and wilting.

Deer mice provide a portion of the diet for a subspecies of the coast garter snake, found [in abundance] only on Mitlenatch. The snake spends much of its time in the intertidal zone where it catches small fish.

Those of us who live in coastal B.C. can count ourselves fortunate to have on our doorstep one of Canada's most important nature parks and bird colonies, accessible at such close range.

[Ed. Note: John Gordon noted that in 1988 Mitlenatch was home to six pairs of Black Oystercatchers. He said: "Found only on the Pacific Coast, this uncommon bird is one that many birders seek. A comical creature about the size of a crow, it has a very distinctive scarlet bill, which is long and laterally flat. Its bulging yellow eyes, pink legs and noisy call make it unforgettable. Feeding in the intertidal zone, it makes short work of clams and Pacific oysters...although over-picking by unscrupulous vacationers may soon spell the end to the birds' supply."]

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- ☞ In August, 1992, a club outing took members on a walk along the Chase River estuary with binoculars and boots. They planned to look for signs of Purple Martins nesting in the boxes. Instead, what they found was Purple Loosestrife, in abundance!
- ☞ In September, a group of naturalists followed Sally Goldes to Rowbotham Ridge on a "moderate" hike to enjoy the spectacular scenery of that area.
- ☞ During Members' night in September Elthea announced that Robert Bateman would be guest speaker at the next Annual Banquet during the coming winter. Tickets for the raffle and dinner would go on sale the following month: - \$20. for members and \$23. for a non-member spouse/guest.

At the end of 1992 Graham Gillespie put together the first annual *Thrush* published in many years. In it was the following article:

Deervetch, or Birds-foot Trefoil
(Bill Merilees)

Botanists and Nanaimo naturalists can rejoice in the fact that the only known location of *Lotus pinnatus* in all of Canada is found along a small intermittent trickle near the summit of the Woodley Range, near Ladysmith. Although this species ranges south through Washington and Oregon and into California it reaches its very northern limit on Vancouver Island, right at our doorstep. Common names for this species pose an interesting question. "The Vascular Plants of British Columbia - Part 2" provides Bog Birds-foot Trefoil. What a mouthful! American

references use Meadow or Bog Deervetch. Personal preference would be Meadow Deervetch, which is much easier to say.

Due simply to the presence of *Lotus pinnatus*, the portion of Woodley Range where this species occurs is proposed for Ecological Reserve status. Once established, constant vigilance will be required to ensure the area remains natural and undisturbed. This species cannot easily be confused with any other member of the pea family in our area. Its bicoloured yellow and white flowers, pinnate leaves and its generally sprawling form are unique.



Lotus pinnatus

Illustration by Bill Merilees

1992-1994

Taking the Measure Of The Problem

"New York spends on garbage collection more than the whole world spends on the United Nations." - Hugh Keenleyside, Canadian Diplomat



Bill Merilees

One of the difficulties in leading a volunteer naturalist organisation is balancing the problem of enjoying a resource that is diminishing. Virtually everywhere we look, we observe practices which make our emotions boil. On the other hand, one of the characteristics of being a naturalist is the desire to be

non-confrontational. Many of our members would simply like to see the problem 'go away', 'go somewhere else' or simply do not wish to be drawn into the controversy. Therefore striking a balance within an environmental organisation is not easy.

In the early 1990's Nanaimo's economy was booming; residential and commercial development was gobbling up many large tracks of land and the Inner Route, euphemistically called a 'parkway', was being planned. This one project alone cut a swath of almost a square mile of land as it snaked through Nanaimo from south to north! Trying to find compromises and to get the right decisions made, amid bureaucratic regulations with little concern for biodiversity or ecological principles, put the Nanaimo Field Naturalists at a crossroad. Finding people with the desire to address some of these many issues is never easy. Frequently they are among our newer and younger members: people who often are

already committed to other important issues as well as to their young families. The Nanaimo Field Naturalists Club has always had good, dedicated people. As our members know, I am a project-oriented person who likes to see things get done (by others if I can!) I do not enjoy long meetings that discuss but seldom act; and I appreciate realistic and practical goals. This makes for a tough agenda, but I think the Minutes of our Club meetings during 1992, 93 and 94 reflect many accomplishments by a caring team of good people. Sincerely "Bill"

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The good folks who joined Bill's team in October 1992, were: Graham Gillespie, Past President; Elthea Dale, Secretary; Joan Greenhorn, Membership; Kate Hall, Publicity; Karen Mullen, Conservation rep; Gordon and Rene McLean, and Steve Baillie, Newsletter Committee. The offices of Vice-President, Treasurer, and FBCN delegate remained vacant for months before Bill found volunteers to fill them. In the meantime, Darlene Gillespie continued to act as Treasurer until someone else was willing to take over.

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Barrington Bog was situated between Rock City Road and Departure Bay at the top of the hill where, Bill Merilees said, "fossils of the clam *Mya intermedia*, a species now found only in the Aleutian Islands, had been discovered more than 300 feet above sea level, indicating the site had once been part of a shallow bay. The peat sediments in the bog provided a vegetation history possibly 10,000 years old." While City staff were bogged down with details of trying to save part of the property, the owner, Holly Hill Holdings Ltd of Victoria, drained it and scraped off all the peat from the bog. Bill told reporters, "The bog has been destroyed. The owners have felled all the trees and systematically cleared off all vegetation, essentially destroying all natural and scientific values of this location."

A week earlier developers had cut down the trees supporting a **Great Blue Heron** rookery on Hammond Bay Road (Westhaven Properties Inc of Vancouver). Graham Gillespie contacted the Press to make a fuss about this mindless act, which resulted in local papers printing several articles on the subject. That was how Bill Merilees' second term as club president began...and how the year almost ended.

Bill agreed to speak to City Council on the Club's behalf regarding the wanton destruction developers wreak on Nanaimo's natural habitat. In addressing Council he said, "Unless we take into consideration the unique values of these natural places we stand a good chance of losing all of them. We have to understand the City's natural base."

He noted the destruction of Barrington Bog and the heronry and said, "If we'd had a comprehensive inventory, we could have made plans to protect these areas a long time ago".

Nanaimo's Biological Diversity

Early in 1993 Bill submitted a Bio-diversity Study Proposal to City Council on behalf of the Nanaimo Field Naturalists. He commented that "the recognition of Nanaimo's unique biological diversity and the preservation of habitats and rare species is urgently needed and should be included in the City's Official Community Plan. These natural areas are of great importance to the well being and environmental health of the City. Along with parks, green belts, riparian corridors, walkways and bicycle paths etc, these areas not only act as buffers and quiet places, but they provide a means of preserving our natural heritage. They will provide places for environmental education and will serve as monuments to wise stewardship. They also have intrinsic values incalculable to future generations."

Some of the factual data Bill Merilees provided included the following:

- "Departure Bay has the mildest mean annual temperature in all of Canada.

- Seabird colonies on Snake Island, Five Fingers and Hudson Rocks are among the most significant in southern Georgia Strait.

- The Nanaimo River is noted for its salmon runs while its estuary is one of the largest on Vancouver Island.

- The worlds largest waterfowl, the Trumpeter Swan, and numerous species of other waterfowl, regularly reside on our estuary's tidal flats.

- Spring and summer wildflower 'shows' are spectacular on the Harewood Plains, Cedar-Yellowpoint, Piper's Lagoon and the Shack Islands.

- California and Steller's Sealion haulouts in Northumberland Channel are among the most spectacular known in B.C.

- Fossil ammonites and giant clams found along stream valleys below Mount Benson are believed to be about 75 million years old.

- The headwaters of the Nanaimo River (Green Mountain) has the largest number of Vancouver Island Marmots on Vancouver Island. This [endangered] species, numbering between 100 and 200 individuals, is one of only two mammals endemic to all of Canada.

- The Northern Alligator Lizard and five species of salamander are still present within the City of Nanaimo limits.

- The Golden-backed Fern possibly reaches the northern limit of its distribution on the rocky hillsides above Departure Bay.

- Winter Bald Eagle counts in the Nanaimo area regularly exceed 500 individuals. This species is a city resident.

- The Pea-mouth Chub on Vancouver island is confined to Holden Lake.

- Groves of Garry Oak (B.C.'s only native oak), and Arbutus (Canada's only broad-leaved evergreen), are prominent in Nanaimo.

- Anna's Hummingbird is regularly found in Nanaimo, even during the winter.

This wonderful heritage goes on and on. In contrast, the City of Vancouver has virtually culverted every stream, drained every marsh and extirpated many of its native mammal species. Nanaimo, on the other hand, has the opportunity to preserve its natural diversity which includes lakes and their associated shoreline vegetation, natural stream courses as corridors, and rocky hills and knobs, as part of a marvellous mosaic."

A Birding Trip

(Steve Baillie)

Seven eager birders together in my van, caught the Mid-Island Express ferry early on the morning of November 15th, 1992, for an excursion to birding hotspots across the Strait. Accompanying me (in alphabetical order) were Allison Cookson, Elthea Dale, Graham Gillespie, Rick Ikona, Karen Mullen and Jill Sims. At the Tsawwassen ferry terminal we spotted hundreds of various species of ducks but were frustrated by the lack of shoulder on the long viaduct on which to pull over safely. Eventually we were able to halt and see vast numbers of Northern Pintail, Western Grebe, American Wigeon and countless other varieties. A quick call to the Vancouver Rare Bird Alert soon had us speeding towards Brunswick Point - an area between Reifel Wildlife Sanctuary and the Roberts Bank coal terminal. We obviously hit a popular spot for there were a number of vehicles. The reason was 4 Snowy Owls

which had taken up residence on large logs along the shoreline. Although they were about 500m away, we got good views of them with the spotting scopes. As if this wasn't enough, 2 Great Horned Owls were roosting in nearby trees beside the dyke. If there were some who were still not satisfied, we also found American Tree Sparrows working their way through some nearby blackberry brambles!

On to Reifel!...but on the way we spotted a flock of 2000 Snow Geese which apparently had a Ross' Goose hidden among them (or so said the Rare Bird Alert). We stopped and scanned and looked for about 15 minutes before giving up. Finding a mallard-sized snow goose among so many was impossible. Reifel produced a couple of interesting finds. A Sandhill Crane which had dropped in the previous summer to befriend the resident, non-flying crane, but had liked it so much, had never left. We also saw a Northern Saw-whet Owl hidden in one of the large fir trees....and as usual, the place was full of the rare (for us) Black-capped Chickadee.

Just as we were about to leave Reifel, that flock of 2000 Snow Geese we had been studying earlier, flew over our heads; wave after wave, the sky was filled with them. What a sight!

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The Annual Banquet in early February 1993 was a success with 50 people attending. Robert and Birgit Bateman were the Club's dinner and overnight guests at the Yellowpoint Lodge. One highlight of the evening was Robert Bateman's presentation to Anneke and Peter Van Kerkoerle of an Honourary Lifetime Membership in the Club. Steve

Baillie used his artistic talents to make a hand drawn keepsake 'certificate' for them, which read: *"In Recognition of their Long-time Service and Support, the Nanaimo Field Naturalists are pleased to award to Peter and Anneke Van Kerkoerle a Lifetime Membership"*.

The other unexpected event of the evening was the Batemans generous donation to the Club of 12 signed Posters.

[Ed. Note: The Robert Bateman posters have since been raffled off at the rate of two posters per year, and to-date have raised over \$1000. This money, together with that raised from the extra charge for the Banquet each year goes towards the Nanaimo Field Naturalists' scholarship fund. This 'bursary' is awarded annually to a Malaspina University-College second-year student following a course of study in the natural sciences. As a further result of their visit to the Club, the Batemans also donated \$500. to Vancouver Island Marmot research.]

Robert Bateman's topic that evening, was the ecological crises humans have created through their careless, (north) american-made attitude of self-indulgence. He suggested that a step in the right direction to saving not just our grandchildren, but our species, may be a return to smaller, self-contained communities in which conservation, protection and diversity dominate our thinking.

In 1992-93 The Rivers Defence Coalition, sponsored by the Quesnel Naturalist Club in the B.C. Interior, was asking for donations to continue with its legal battle against the Kemano Completion project. The N.F.Naturalists donated a token sum of \$25, but also wrote several letters to the Minister of

Fisheries and Oceans and to the provincial Environment Minister, to protest the damage caused to the Nechako River by Alcan.

Millions of dollars had been earmarked by the government to revitalise the Fraser River, so it didn't make sense that all but 12% of the original flow of water from the Fraser's second largest tributary, the Nechako, was to be diverted for use by Alcan and BC Hydro. The battle to save the Nechako River had been ongoing since the mid-1970s. It took 20 years for the provincial and federal governments to finally listen (through a series of public and in-camera hearings and court cases) to the people - and the scientists - about the damage being done to these salmon spawning waterways; damage caused as a result of diverting and drastically lowering water levels.

- ☞ The Club donated \$200 to the World Wildlife Fund which made the Nanaimo naturalists "guardians of 200 acres of tropical rainforest".
- ☞ 17 Kms of the East Coast of Vancouver Island was designated Wildlife Reserve status in order to protect the Brant staging areas. This happened largely as a result of the high profile this little "sea goose" received from the annual Parksville/Qualicum Brant Festival begun a year earlier, in 1991.

On May 6th, 1993, an article appeared in the Nanaimo Times, written by Karen Mullen:

Pitch-In Week Spawns Clean-Up Campaigns (Karen Mullen)

It's Pitch-In Week across Canada. Volunteers organise cleanup campaigns and promote reducing, reusing and recycling of waste materials in their communities. The Nanaimo Field Naturalists have participated in this program for several years. It is important for local residents to realise how extensive illegal dumping and littering is in our area. Last year our project centred on the Jinglepot Marsh, a significant wetland area for birds and other wildlife.

We received a generous donation of garbage bags from the City Works Yard, while the Regional District waived dumping fees at the Cedar landfill site. Using two small trucks, our group of 12 people removed 1.5 metric *tons* of garbage. This has clearly been a popular dumping area for some time by a variety of users.

There was enough scrap building materials for a small house, complete with roof shingles. We could have furnished it with the discarded chairs, sofas, bedsprings and appliances we found. From the scrapped car parts we could have made a vehicle. It may even have run if we had been able to fix the transmission and batteries that were leaking into the marsh.

Remains of swing sets, plastic wading pools and other toys would have kept any child happy. Then there were the bags and piles of grass clippings, which could spontaneously combust during warm weather, and other compostables carelessly tossed into the area.

Altogether it was a very sad commentary on our community's lack of care and protection of a valuable natural resource. This year, the Nanaimo Field Naturalists will be cleaning up Piper's Lagoon Park. Let's hope our garbage bags remain empty and that we find evidence that people are attempting to keep their public green spaces free from litter.

[According to Karen, 120 Kilograms of garbage was picked up at Piper's Lagoon, much of it plastic and cork objects which had been thrown from boats and floated in from sea. She wondered what else had been thrown over board that sank instead of floating to shore!]

- ☞ The month of May also brought the Naturalists to Malaspina College to teach nature courses:
- ☞ Graham Gillespie's **Fishes Off Our Shores**, took place on Saturday afternoon, April 24th. It started with a slide-lecture introducing the marine fish found off B.C.'s coast. Then the class adjourned to the shore where they got to use a beach seine to observe specimens for closer study.
- ☞ Steve Baillie's course, entitled **Birds, Birds, Birds** was held on May 1st. He gave a lecture-slide presentation, which was followed by an afternoon field trip to the Jinglepot Marsh.
- ☞ Bill Merilees' course **Between the Tides** took place on May 8th, and introduced participants to intertidal marine life in an illustrated lecture... then out to Stephenson Point to explore seaweeds and intertidal invertebrates such as crabs, limpets, chitons and other sea creatures.

At the end of May (28-30th), Bill Merilees and Graham Gillespie organized a club trip to the Okanagan Valley where they found Great Basin, Boreal forest and prairie birds, and innumerable unique botanical species.

According to all reports, the group had a great time and were thrilled with the numbers and varieties of birds and plant life they found - often for the first time. One keen naturalist was quite overjoyed to bring home two dead snakes for his collection - a juvenile Rattlesnake and a Gopher Snake!

The cost (\$165 double occupancy) included two nights, two lunches, and bus fare. They visited Manning Park, White Lake, Okanagan Falls, Vaseaux Lake, Harpur's Ranch and several other places enroute. The group of 40 were divided into *birders* and *botanists*, and then there were the *generalists*, like Kanya Baillie who had an experience she would never forget:

The Columbian Ground-Squirrel

[Or, what it is they like to eat]
(Kanya Baillie)

Steve and I thoroughly enjoyed ourselves on the recent Club trip to the Okanagan. Steve likes to spend his time stalking birds, while my natural history interest is more general. I like to observe all that goes on around me.

On the first day of our trip we stopped at Lightning Lake in Manning Park for lunch. This spot is a favourite for picnickers - and for the Columbian Ground-squirrel. This small member of the rodent family is a very bold scavenger

when it comes to gleaning handouts from the two -legged transients who seem to enjoy giving away their food. I had just finished my sandwich, and was working on an apple when I wondered if they would like the core.

Kneeling down, I held the core between two fingers. Several of the squirrels came forward to take little bites before retreating to their holes. One ground-squirrel in particular looked interested but hadn't yet approached. I held the core out towards him. Suddenly, he planted his two little front paws firmly against my fingers, and with a quick tug with his teeth, he had the whole thing in his mouth. This fellow knew the scavenging business! With a triumphant squeak, he shot down his hole and out of sight...apple core and all.

☞ In June the annual barbeque was held at Bill and June Merilees' home in Departure Bay.

☞ During the month of July, there were walks to Dodd's Narrows via the White Road trail; and through the beautiful forested Yellowpoint Park.

Also in July, Al Cameron of the Nanaimo Free Press wrote an article about the "Marsh Invasion" - of the dreaded **Purple Loosestrife**, after interviewing a couple of members of the Club.

"A purple plague is invading Nanaimo's marshes and riverbanks", he wrote. "The purple loosestrife is not only thriving, it is slowly but surely forcing out all other forms of vegetation. Bill Merilees, President of the Nanaimo Field

Naturalists, said: 'It gets into marshes and then basically chokes out other vegetation and the biological diversity of the area disappears. So far the infestation is limited to two areas of Nanaimo that we are aware of: Buttertubs Marsh and the mouth of Chase River.' [Ed. Note: As a result of this newspaper article the club was advised of another bad infestation located at Diver Lake.]

"But dealing with the infestation isn't an easy matter. The plant has a deep, wide root system, often going 30cms or more deep. As well, there are plenty of seeds on each plant that can be carried with the wind or water. Purple Loosestrife is not native to Canada. It arrived from Europe a century ago and has rapidly made its way across the country.

"The plant measures one to two metres in height, with smooth-edged pointed leaves that grow directly opposite to each other along stalk and stems. The stalk is distinguishable by its square shape. The pinkish-purple flowers are formed in a long spike and bloom from June to September.

"Its not an unattractive plant and many florists have used loosestrife for its decorative appeal. 'A lot of people may have them growing in their backyards and probably aren't even aware of how dangerous it is' said Mr. Merilees. 'Using a weed killer like Roundup is effective, but extremely dangerous in wetlands where the poison could get at other plants as well.'

"The Nanaimo Field Naturalists have regular work parties to deal with the problem. Another option being considered is bringing in insects from Europe that feed on the plant. Purple

loosestrife has no natural enemies on this continent, but three varieties of insects from Germany do feed on the plant."

[Ed. Note: According to Bruce Cousens, who became leader of 'project PL' the following year, a formulation of Roundup, called "Rodeo" is approved for wetland use against purple loosestrife in the USA. To date Roundup has not been approved in Canada. The three insects the Club got approval to use were two Chrysomelid leaf beetles and one Curculionid, or weevil. Bruce set up an experimental release area in the Diver Lake region and two years later reported success, inasmuch as the insects thrived, survived the winters and multiplied. Bruce warned, however, that it will take a few years to get the Diver Lake infestation under control. He emphasized that the weed would never be completely eradicated.]

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When autumn rolled around, the President's message contained these notes: "I wish to thank each member of our executive for volunteering their services. It is very encouraging to have a *full* team. To the 'old hands' we all owe considerable gratitude: Kanya (Table Sales) and Steve Baillie (Newsletter), Elthea Dale (Secretary), Steve Goh (FBCN delegate), Joan Greenhorn (Membership), Kate Hall (Publicity), and Karen Mullen (Conservation Rep).

"To the 'new hands', Laura Beck (Program-speakers), Arline Haddaway (Treasurer), and Charlene Lee (Vice-President), a warm 'Welcome Aboard'.

"The new executive will be presenting several amendments to the Club's Constitution for approval and ratification by the general membership in November. About 30 Gabriola Island residents have expressed an interest in forming a

'satellite' naturalist group as a chapter of our Club."

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Tatshenshini-Alsek Wilderness Park

In a news release in early 1994 it was announced that the Tatshenshini had been designated a World Heritage Site of outstanding global value. This decision had been made by the United Nations Educational, Scientific and Cultural Organization (UNESCO), during a meeting of its World Heritage Committee in Thailand. (Other such heritage sites include the Grand Canyon, the Canadian Rocky Mountain Parks, and Australia's Great Barrier Reef.) The Tatshenshini-Alsek Wilderness Park is one million hectares of the extreme Northwestern part of B.C. It is wedged between the Yukon's Kluane National Park Reserve and Wrangell-St. Elias and Glacier Bay National Parks in Alaska. Together they form the largest international World Heritage Site on earth - 8.5 million hectares. This was welcome news to naturalists everywhere who had written and petitioned provincial and federal officials to protect this beautiful part of Canada.

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DONT FEED THE DUCKS...bread!

As a result of a suggestion made to the Nanaimo Field Naturalists and the Ministry of Environment by members of Morrell Sanctuary, a project was launched by Bill Merilees to have feeding signs made available, to let people know that bird seed and corn is better than bread for ducks and geese.

These nature signs were financed by the FBCN Vancouver Island Region at a cost of \$50.00 each. Much discussion

took place as to the illustration and the wording, as well as what material should be used to vandalise, bullet- and weather-proof the signs. Once various government agencies approved, they were placed by the Nanaimo club at Buttertubs Marsh, Diver Lake, Long Lake and Bowen Park.

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- ☞ The Christmas Bird Count on Boxing Day brought out the Club's best effort yet with 120 species!
- ☞ With room rates rising without warning, and the added aggravation of noisy neighbouring groups, the club membership felt obliged to move its meeting venue from Beban to Bowen Park in February, 1994.
- ☞ A Bird Bungalow Building Bee at Bill's took place on Saturday morning March 9th. This busy workshop was in aid of bird houses (for swallows, purple martin and chickadees), and feeders needed for the club's upcoming mall stall and garage sale.
- ☞ At their regular meeting in March, Mark Hobson from Tofino was guest speaker. He had been one of the artists who worked on the Club's Perpetual Nature Calendar.
- ☞ During April, The Nanaimo Field Naturalists presented Morrell Sanctuary Society with a donation of over \$750.00 towards their new 'Woods Room' interpretive centre. The money was raised through sales of the Club's Perpetual Calendar.
- ☞ The Arrowsmith Club invited Nanaimo members along on a couple

of their outings: a trip into Rhododendron Lake and a strenuous hike to the top of their namesake.

- ☞ In June, Lyle and Jody Carson hosted the club's annual barbeque at their home in Cedar.
- ☞ Bill organized a Buttertubs Work Party in July to clear out the Purple Loosestrife, clear the Hawthorn from around Mountain Ash, and to plant Garry Oak trees and other "good things".
- ☞ The Nanaimo Field Naturalists donated \$300. towards the purchase of Jedediah Island Provincial Park, located between Lasqueti and Texada islands in the Sabine Channel of Georgia Strait.

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During 1994 two items continued to dominate the workload of the Club's busy executive, namely, **Buttertubs Marsh**, and the **Inner Route**. In the spring edition of the club's newsletter, the president wrote:

"The Inner Route will remove a tremendous swath of nature from Nanaimo. The so-called environmental studies for this \$145 million project are woefully inadequate. Aside from "game and salmonids" they neglect the remaining spectrum of our flora and fauna. The impact this project will have on 98% of other life forms may never even be considered. Some magnificent Garry Oaks and habitat for rare and unusual plants, amphibians and small mammals will disappear.

There are virtually a million things each of us can do. The task may seem

daunting, but unless we get involved we could well lose everything through default and Nanaimo would be far the poorer as a result. While it may not be every member's desire to become involved - your executive will try to lead the way."

And lead the way they did! In a presentation to the mayor and city councillors, the Club president said:

"The rapidly accelerating residential development of Nanaimo is exerting pressure on the undeveloped portions of our city. Wetlands, like Buttertubs Marsh, unfortunately are not the exception. With the construction of the Inner Route to the west, the beginning of a 3-phased residential complex on the old golf course to the east, and the possible expansion of the current golf course to the north, the need to consider the long term integrity of Buttertubs is a matter of urgency.

"The Nanaimo Field Naturalists requests that the area bound by Wakesiah on the east, Third Street, Addison and Jinglepot Roads on the south, Westwood Road on the west and East Wellington and Bowen Roads on the north, be established as a Permit Development Area.

"We further request that the City conduct a detailed study of Buttertubs to determine the requirements of maintaining the biodiversity of this ecosystem, and to establish the natural boundary and hydrology regime of the Marsh."

Thus the groundwork was laid for the final development of the Management Plan for Buttertubs, initiated in 1990 by

the Nanaimo Field Naturalists. [See Pages 102-103]. With a BC21 grant, substantial donations from Friends of the Environment and \$500 from the NFNaturalists, a team of Youth Corps were hired to clear, widen and complete the trail encircling the Marsh.

Other general issues the Club discussed with the Ministry of Transportation and Highways were:

- a) the loss of rare plant species not included in their Environmental Report, such as the chocolate lily, camas, death camas, sea blush, spring gold, delphinium, saxifrage, monkey flower, prairie star, flowering dogwood, Saskatoon bush, Garry oak, and bitter cherry of the wildflower meadows in the Harewood Plains;
- b) determining how much additional land would be impacted to either side of the specified 100m right-of-way;
- c) the disruption of natural flow regimes and stream bed conditions and to what extent the recommendations in the environmental report were to be implemented - such as the use of arch culverts, clear span bridges, rip-rap etc;

Concern was also expressed about wildlife needs for corridors; as well as the need for revegetation using native species wherever possible - and avoiding use of Scotch broom.

Before construction of the Inner Route actually began, club members walked the entire highway route over a period of weeks, to record as many plant and animal species observed as well as significant ecological sites such as Garry

Oak meadows, rock plains, wildflower fields, marshes or sentinel trees.

The Inner Route would have serious impact on Buttertubs Marsh from runoff draining from the highway into the marsh; and the Northfield Marsh would be affected in that wildlife access corridors would be blocked by the connector road to the new highway. The highway project authorities were therefore also approached by the executive about these problem areas.

As a result of several meetings between the Club executive and the highway authorities, the plans were reworked to include two drainage ditches from Jinglepot road to redirect the flow into an engineered water quality pond instead of directly into Buttertubs Marsh; U-shaped culverts of appropriate sizes were installed through the fill in the Northfield marsh to provide wildlife access corridors; and a stand of Garry Oak within the highway right of way, that did not absolutely have to be removed, were retained. The Club executive also asked that as many mature trees and vegetation as possible at Brannen Lake East be retained.

Before the bulldozers arrived the following spring, several Club members, with permission, gathered and salvaged hundreds of native plants for transplant into other areas. They also sold them to the general public at Morrell Sanctuary's first annual plant sale.

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In late September 1994, naturalists were invited to a luncheon in honour of Canadian astronaut Dr. Roberta Bondar. Bill Merilees, in addition to being Club

President was also on the Board of the Canada Trust "Friends of the Environment".

When the Friends of the Environment presented a cheque in the amount of \$2,000. to Dr. Ken Langelier to help cover costs of printing his manual on the care of bald eagles, The Nanaimo Times reported Roberta Bondar as having said, "Dr. Langelier's valuable and extensive research on the bald eagle is a wonderful example of how individual initiative can make a positive difference for the environment."

Earlier that day, she had visited some grade 5 and 6 students at Seaview Elementary School and told them that "there is plenty to study on earth before we blast off for other planets. Because if we don't understand our world, we are never going to understand other worlds beyond our own. So, for those who want to be astronauts, you already are!"

At the luncheon, club members got to see her brilliant slides of the earth from outer space taken while she was on board the *Discovery* space shuttle.

In his final President's Message in the fall, Bill quoted from Robert Louis Stevenson: "*Sing a song of seasons, Something bright in all, Flowers in the spring time, Fires in the fall.*" Bill said he would substitute "mushrooms" for "fires".

Another quote from R.L.S.: "*When I was down beside the sea, A wooden spade they gave to me, To dig the sandy shore*" prompted another thought he had about finding three 'new' clam species to his experience during the summer, near

Newcastle Island and in the Queen Charlottes.

He concluded his message with the hope that due notice had been paid to the fact that Greater Nanaimo had been blessed by a good crop of Garry Oak acorns that year. "With all the interest in Garry Oak protection, greening our city, and protecting trees," he said, "this is an opportune time to gather acorns and plant them. Be warned - The Steller's Jays are also aware of these abundant acorns, so fill your pockets NOW! On the other hand, you can always keep an eye on where the Jays are hiding their supply and raid their cache!"



Mallow (Malva)

1994-1996

On The Impossibility Of Making Certain Distinctions

"We can't make distinctions between old and new factories. It would be unfair to the fish. The fish, the crustaceans and the plant life which live in the waters, in their short lives, can hardly take an interest in the age of your mills."

-Raymond Perrier, *Environment Canada*



Charlene Lee

My husband, Bruce Cousens, and I joined the Club in 1993. Later that year, Bill Merilees asked if I would fill the Vice President's position. Although I was unsure what this would entail, I agreed. Before I

stepped into the president's shoes, I had decided not to start new initiatives until some of the on-going ones were either completed or on a firm footing.

My executive and I were concerned about increasing the overall membership numbers, getting younger people as members, and increasing the participation of the current membership. Some of these items we accomplished; others we did not.

The political attitude towards environmental issues in Nanaimo in the mid-1990's was becoming more positive. The general public was gaining a louder and stronger voice to have more of the environment protected before we destroyed it all.

My most satisfying accomplishment centered around the Buttertubs Marsh Conservation Area. In 1995 the membership voted to have the Club enter into an official co-management agreement with the City of Nanaimo and the Ministry of Environment. The trail along

the east side of the Marsh and the new observation platform (both initiated by Bill Merilees) were completed that year. The City provided an Environmental Youth Team to prune back the vegetation and widen the trail, build a viewing platform, and begin work on scotch broom removal. Scotch broom removal and tree and shrub planting has continued on a volunteer basis ever since. A new interpretive sign for the Marsh is expected to be unveiled sometime in 1997.

A small experimental biological control plot with leaf beetles on purple loosestrife was started in 1995 at Diver Lake. The leaf beetles survived the winter and spread in all directions to adjacent purple loosestrife plants during the following summer. The goal was to have the leaf beetles multiply to a point where a sufficient number could be collected and transferred to other local infestations.

The executive created a Bursary for a second year Malaspina University- College student with

academic excellence in one of the natural sciences, an initiative which the membership wholeheartedly endorsed.

To all the members who made my time as president so enjoyable, I thank you. My gratitude goes especially to Kanya and Steve Baillie, Peter and Anneke Van Kerkoerle, Arline Haddaway, Bill Merilees, my executive and my husband, Bruce Cousens.
Sincerely "J. Charlene Lu"

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The volunteers who made up the Club's executive team in 1994 were: Bill Merilees, Past President; Arline Haddaway, Treasurer/Publicity; Elthea Dale, Secretary; Joan Greenhorn, Membership; Laura Beck, Speakers; and Steve Goh, FBCN delegate. (Steve Goh moved to Vancouver in December '94.). Colin Bartlett (Speakers), Margie Bryant (Secretary), and Chad Henderson (Conservation Rep.) joined the team in 1995 and Elaine Dally (Treasurer) in 1996.

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Bill Merilees continued to take a strong lead in the affairs of the Club, and at their annual banquet in January 1995, the members found a way of expressing their gratitude to him. They presented him with a Lifetime Membership. The keepsake certificate read: *Thank you Bill, for showing us how much a dedicated naturalist can achieve. In appreciation, the Nanaimo Field*

Naturalists present to you a Lifetime Membership.

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In the December 1994 Newsletter, Karen Mullen's Conservation Notes observed: "...a landfill trench with a container of DDT was found near Rainy Hollow, B.C. It was believed that up to 30 more barrels were buried there. An environmental emergency was declared to allow the cleanup to proceed quickly. This area is now inside the border of the new Tatshenshini-Alsek Wilderness Provincial Park! Formerly, this site was an oil pumping station operated by the U.S. Army Corps of Engineers, until 1974. DDT however had been banned for use in Canada since 1972.

"In the same Park, 'Geddes Resources' was given three days to submit a cleanup plan for the Windy Craggy exploration site. Apparently that company had left behind a storage tank that spilled almost 22,000 litres of diesel fuel. A BC government news release stated 'it is believed that an avalanche caused a crack in the storage tank valve. The site also contains eight other fuel tanks, battery acid spillage, laboratory chemicals and an unauthorised pit for disposing waste oil.'

"Remember, this was the same company that wanted to store acid mine waste behind a dam in an earthquake-prone area as its method of protecting the fragile northern ecosystem. They couldn't even keep a storage tank safe!"

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- ☞ During 1994, MacMillan Bloedel was charged under the Federal Fisheries Act for harmful alteration of fish habitat in the Clayquot Sound area.

Canadian Pacific Forest Products (of Nanaimo) was fined \$5,000 for contravening Special Waste Regulations.

- ☞ The Ministry of Environment announced provisions to allow private land owners to enter into conservation covenants to permanently preserve their property or any specific features on the property with natural, historical, cultural, scientific, or environmental values and for protection of wildlife (flora or fauna).
- ☞ According to the Club's December 1994 newsletter, "the BC government purchased 131 hectares known as Stoltz Pool in the Cowichan River corridor. Straddling the River midway between Duncan and the village of Lake Cowichan, the property - also known as 'the Riverbottom' - contains the last stand of old growth timber in the valley. The Cowichan was listed as one of the most endangered rivers in B.C. and protection of this corridor was vital for fish and wildlife habitat survival."
- ☞ "Forty-five kilometres of waterfront on the Strait of Juan de Fuca was also secured by the B.C. government to create a new hiking trail similar to the West Coast Trail. The West Coast trail is limited to 8000 hikers each season; it also requires payment for reservations, and is best suited to those able to make long, physically demanding treks. The new Juan de Fuca Marine Trail, on the other hand, would provide a great deal of flexibility and variety for both serious

hikers and visiting day-trippers. It is ideal for youth, and seniors and visitors do not need to make reservations or pay user fees. When the trail is completed it will stretch from Jordan River to Port Renfrew.”

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Buttertubs Management Committee

As President of the Club, Charlene Lee automatically became the Nanaimo Field Naturalists' representative, in October 1994, on the Buttertubs Management Committee.

At the January 25th, 1995 Club meeting, Charlene requested that a motion be made to create a Club 'buttertubs marsh committee' which she would chair. As chairperson, Charlene would continue to represent the Club on the Buttertubs Management Committee after her presidency ended - a role club presidents had traditionally assumed along with their other many duties. The new 'committee' would be able to concentrate solely on the co-management and "guardianship" of the Marsh and thus alleviate this responsibility from future presidents. The motion was enthusiastically passed by the membership. *[Presidents automatically become ex officio members of all Club committees.]*

The Buttertubs Management Committee has been in existence for many years, sometimes being active and floundering at other times. The Nanaimo Field Naturalists' interest in the Marsh and its proper 'management' goes back almost to its beginning in the 1970s. (See Brian Wilkes's section beginning on page 20) When the Buttertubs Management Committee was created one of the Club's earliest representatives was Kim

Goldberg. After a time the Committee floundered again but was 'resurrected' in 1990 (see pages 102-103 & 120). It has nearly always consisted of representatives from the Nanaimo Field Naturalists, the City of Nanaimo, the Ministry of Environment and the Nature Trust of BC. These various parties finally drew up a draft agreement in 1996 to 'formalize' their respective roles: In October 1996, Charlene reported to the Club membership that...:

...the **Province** (BC Environment Ministry) has a 99 year lease to monitor activity in the Marsh on behalf of the owner, Nature Trust, and may deal with problems that cannot be handled by the City of Nanaimo and/or the Nanaimo Field Naturalists. It would also perform the lead role in administration of the Marsh by acting as the lead planning agency (by co-ordinating and hosting meetings with the other partners to decide on annual and long term objectives), as well as securing the funds for the general upkeep of the Marsh, and developing signage, marking land boundaries etc.

The **City** would provide maintenance of the trails and public facilities, such as benches, viewing platforms and the dike, and implement dog and goose control.

The **Nanaimo Field Naturalists** would be responsible for initiating the development of the annual management plan, and act as volunteer guardians by reporting management and maintenance/public safety issues to the Province and/or City, or both. It would also provide the volunteers to do the work of wildlife and plant inventory programs, as well as implementing volunteer projects

such as invasive vegetation control, and interpretative/public education programs. No financial commitment by the Club was implied or spelled out.

Representatives of the parties to the Co-Management Agreement together develop and agree upon an on-going 5-year "Management Plan" (see page 127) and implement it, according to their respective agreed-to responsibilities.

[Ed. Note: As of June 1997 the Co-Management Agreement had not been finalized or signed by the Parties involved.]

- ☞ The January 1995 regular meeting guest speaker was Mark Saunders from the Pacific Biological Station. He spoke to a group of more than 60 people about our West Coast Sharks.
- ☞ In February 1995, the Club "adopted" a Vancouver Island Marmot for \$100. Her name was "Tough Gal". Sadly she disappeared the following winter of 95/96 and was presumed dead.
- ☞ Also in February 1995, Steve Baillie led members on a 'mystery destination' bird trip, which turned out to be Cathedral Grove and Tofino Inlet.
- ☞ In March, a group visited Merv Wilkinson at his sustainable woodlot, "Wildwood" near Quennell Lake.

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In her President's message in March, Charlene said: "With the promise of more mild and rainy weather, and the blooming of snowdrops, crocuses, the first pink rhododendrons and hazelnut trees, spring is surely just around the corner. Time to be outside working in the garden and going for walks between

rain showers. There is always something happening at Buttertubs Marsh. When we go out on the plant salvage trip along the 'parkway' this month, we would like to collect shrubs to transplant along the east side of the Marsh where more broom is to be removed. During the rainy season, try an evening walk at Buttertubs when water levels are high and hear the beavers logging, harvesting cattail roots and splashing about".

.....

- ☞ Charles Thirkill was invited to be guest speaker at the Club's March meeting. His timely topic was *Nanaimo's Creeks and Streams and How They Are Doing*.
 - ☞ A Stream Stewardship Workshop was held at the Coast Bastion Hotel, in April, co-hosted by the Nanaimo Field Naturalists and the FBCN Vancouver Island Region.
-

Buttertubs Marsh

On Sunday, April 2nd, a number of members spent a quiet spring morning on the improved trail at Buttertubs Marsh. Charlene wrote a letter to the City of Nanaimo listing the many improvements to the Marsh which those early morning strollers observed and enjoyed: -

"-The east side trail has been widened considerably and now has a good layer of bark mulch. Several of the low, wet spots along this section of the trail have been raised and/or ditched and culverted.

"-There is a new observation platform from which to view wildlife. [This platform, built near the site of the old dairy foundation, is on the opposite side of the marsh from the viewing tower built on the dike several

years earlier by inmates from the Brannen Lake Correction Centre.]

"-Much of the broom along the dike pathways has been removed and the blackberry and hawthorn have been cut back along all the trails.

"-The height of the trail between Bird Sanctuary Drive and Buttertubs Drive has been raised with a significant layer of gravel.

"-The trail by the duck feeding area is beautifully terraced.

"-The most noticeable and welcome change is the completion of the last section of trail on the east side, making a walk around Buttertubs Marsh all the more enjoyable."

[Ed. Note: Most of the work listed above was done by the Environmental Youth Corps hired by the City, and supported financially by the Nanaimo Field Naturalists and the Canada Trusts' Friends of the Environment Foundation.]

The Buttertubs Management Committee continues to develop its five-year plan to enhance and maintain the Marsh, including up-dating and up-grading the signs; placing distance markers for the joggers and walkers; removing broom and planting native trees and other vegetation; and the placement of self-guided interpretive tour signs around the whole area.

Encounter at Buttertubs Marsh

(Bruce Cousens)

One evening in September, just after we passed the observation tower at Buttertubs, I looked back over my shoulder (a handy habit in the bush) to

see what seemed like a well fed large dog strolling along behind us. As it came closer, I realized that our follower was in fact a small black bear of 100 lbs or so, heading south towards Jingle Pot Road.

Okay, what to do?...Since we were already past the tower there were only three ways to go: - back (dumb), forward (also not entirely clever in the dark since turning one's back on a black bear is a bad idea at the best of times), or over the side (wet). We stopped; it continued to approach cautiously, sniffing, but presumably unable to smell us because a slight breeze was blowing across the dike into the West Marsh. We moved a little, making some noise, but trying not to sound too aggressive. No discernable effect and no sign of aggression from the bear; just a determination to keep coming along the dike.

We probably could have walked on ahead of it without a problem, but I didn't relish losing track of it in the dark, then bumping into it somewhere on the way back to our car, so instead we just moved over to the upwind side of the dike, out of the way, and waited. The bear moved over to the extreme downwind side as it moved closer, then cautiously past us, 20 feet away, sniffing as it went by, and continued strolling towards Jingle Pot Road.

According to Bill Merilees, bear sightings at Buttertubs are unusual, but not unheard of. What was this young bear doing there? When we encountered it, not much, but apparently trying to make a graceful exit back to the woods. It may have wandered down the Millstone River until it hit suburbia, or been snacking over at the Westwood

Road apple orchard, or had become disoriented by the 'parkway' construction activity and landscape disruption. Or perhaps it had simply been turfed out of mom's home range and gone for a walkabout, looking for a new piece of real estate to call home. It certainly wasn't looking for trouble and I suspect it's now long gone; but folks walking around Buttertubs Marsh in the next while might be wise not to focus their attention entirely on the ducks!

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☞ The latest revised edition of C.P. Lyons' *Trees, Shrubs & Flowers to Know in British Columbia & Washington*, was published in 1995 and had a 'junior' co-author - Bill Merilees. The club sold the books to its members for \$17.00.

☞ At Member's Night in the fall of 1995, the group brought their slides, curiosities of nature, and money, for not only did they have the traditional activities of the first meeting of the Club year, but also held a type of auction called Pick-a-Prize. A drawbox was located in front of each item, and 'raffle' tickets were purchased and deposited in the box. The owner of the most tickets in the box entitled that person to the object. Some of the prizes included a decorative wreath, a matted photo of an orchid, and a bird feeder complete with birdseed. A fun way for the club to raise a little extra money.

☞ On November 24th members were treated to a fascinating presentation by the Pretash's on their extensive research and radio-telemetry tagging of Marbled Murrelets on BC's north

coast and in Prince William Sound in Alaska

☞ At Christmas time, Margie Bryant's children, she noted in the Newsletter, got quite a surprise when they opened their 'stockings'. They each found a coloured picture with information of a bird that had been adopted for them at the Raptor Recovery Centre. One was a Saw-whet Owl and the other a Red-tailed Hawk which her son helped to release in the spring.

☞ In the spring of 1996, members of the club enjoyed a trip out of Port Alberni on the MV *Lady Rose* which Margie Bryant had organized.

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Some changes occurred on the Club's executive team in 1996. Chad Henderson agreed to be the Club's Conservation rep. at the FBCN, a job that Karen Mullen had vacated a few years previously, although she continued to provide her commentary on conservation issues, in the Newsletter. Arline Haddaway volunteered to be Vice-President, and Elaine Dally volunteered to replace her as Treasurer.

The President asked Margie Bryant to add the Newsletter to her duties as Secretary. Steve Baillie had been the Editor for six or seven years and needed a rest. However, only a year later, Steve was back, rested and ready to take possession of his beloved Newsletter once more.

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☞ Buttertubs Marsh was renamed the *Buttertubs Marsh Conservation Area*.

- ☞ Colin Barlett said that his shop, *The Backyard Wildbird & Nature Store*, would sponsor a RARE BIRD ALERT with weekly sightings and birding tips. [Ed. Note: phone 390-3029].
- ☞ In recent years, many of the Island's naturalist clubs found they needed to find advertisers to help offset the ever-increasing costs of publishing their newsletters. Advertising in the Club's Newsletter began for the first time in 1996 with one advertiser, *The Backyard Wildbird & Nature Store*.
- ☞ In May, the Club's first President, Dr. David Kerridge, provided an entertaining lecture on Bats commonly found on Vancouver Island - and elsewhere.

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The spring of '96 saw some shenanigans going on at the Charlene Lee/Bruce Cousens household. *Readers be warned that the following article is rated 'r' !*

Matrimonial Tag

(Bruce Cousens)

For the past week or so we have been treated to the least conventional, ongoing comedy of two female Northern Flickers vying for the attention of one male. This has amounted to what seems an almost continuous game of matrimonial tag wherein both females follow the male everywhere he goes, displaying colourfully fanned tails, making squeaky-toy noises and trying to bump one another off whatever they may be perched upon. The amusement peaks as they spiral around a tree trunk, or grab a beak full of chopped peanuts before being dislodged from the flicker feeder.

Most of the time the male tries to stay out of the way.

Presumably the strategy is to interfere with mating opportunities until one or the other female gives up from frustration, or exhaustion, or maybe lack of a decent meal. On one occasion one of the females either briefly lost track of who was 'it', or called 'time out' for a snack. What followed was the other female homing in on the male perched nearby.

Several brief matings followed, after which the male sat peacefully preening in the sun while the obviously victorious female flew all over the neighbourhood shouting her success at the top of her voice and drumming loudly on every resonant surface she could find. While the victorious female celebrated, the other one remained discretely out of sight. And the male? He continued his preening, and quietly waited for the 'games' to begin...again!

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1997

On Expecting It To All Come Out

Okay In The End, Somehow

"Nature has good intentions, of course, but as Aristotle once said, she cannot carry them out." - Oscar Wilde, 1891

The Truth Of The Matter

"We have met the enemy and the enemy is us." - Pogo



Arline Haddaway

My interest in birdwatching began while my husband Peter and I were living in Toronto during the 1980s. When we retired to Nanaimo in 1991 I found the Nanaimo Field Naturalists to be

the natural way to continue with the best birders in town; and they willingly put up with such a neophyte birder as I.

I joined the executive team as treasurer in 1993 becoming president three years later with one condition, i.e., that Charlene Lee continue to be our representative on civic environmental issues. She and Bill Merilees have been a tremendous help with the issues that have come up this past year.

One of the highlights of my term was our annual banquet last January. It was a 25th anniversary celebration with most of our past presidents attending and "the Marmot man", Andrew Bryant, our guest speaker. The other highlight was the completion and unveiling of the new interpretive sign at Buttertubs Marsh Conservation Area on June 19th. Our Buttertubs committee had been working with the artist for more than a year.

The members of the Executive join me in wishing us all another 25 years of enjoyable Club activities, worthwhile aspirations and many, many achievements! Sincerely, "Arline".

In her President's message in the December Newsletter, Arline said: "Peter and I returned from humid, hot Trinidad (where we celebrated our 40th wedding anniversary), to cold, wintry Nanaimo. What a shock to the system! This snowy weather is a reminder that the Christmas Bird Count is nearly here - Dec. 29th. Let's hope the Snowy and Short-eared Owls presently at the Nanaimo River Estuary, stay around to be counted. As your President for the next year, I look forward to your support in our various outings and endeavours; especially the celebration of our club's 25th anniversary. Best wishes for an enjoyable Christmas and New Year and may your bird count be super!"

☞ Well....it was! 117 species! Our best effort to-date. But the count had to be delayed until the very last day of the count week due to record snows. The worst (and deepest) snows in 75 years had hit the Island.

☞ Another item in the December Newsletter was entitled :*Travellers Return*. Bill Merilees, Ida Welland, Hazel McNish and Dave and Margaret Kerridge had all gone on a tour of the National Parks of Queensland, Australia, including 5 days on the Great Barrier Reef. (with Bill leading the group as the Naturalist guide.) They saw more

than 200 species of birds, and 20 species of mammals including cassowaries and kangaroos and turtles on famous Heron Island laying their bountiful supply of eggs under a full moon!

☞ The annual banquet was held January 23rd at the Yellowpoint Lodge. Fifty members were present to celebrate the Club's 25th Anniversary and to greet so many of their past presidents, each one of whom were presented with the Club's new pin. *[Each will also receive a copy of this Journal.]*

☞ In the February Newsletter Arline noted that to commemorate the 25th anniversary T-shirts were ordered with the Club's logo (our beloved V.I. Marmot) and the Club pin was commissioned. It is a small, enamelled, oval-shaped pin with the club logo, and the words "Nanaimo Field Naturalists Est. 1972" printed in brown against a cream field. Arline also noted that [as the 25th anniversary committee chairperson], "Elthea is going full speed ahead on our Club's history and we will soon be able to read all about it!"

[The Executive decided that a copy of this book would be provided to the Nanaimo Community Archives (sponsored by the Nanaimo Museum, Malaspina University College, and the Nanaimo Historical Society); copies would also be given to the Vancouver Island Regional Public Library (Nanaimo) - which has already asked for a copy, as well as to Morrell Sanctuary and the Federation of B.C. Naturalists.]

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NEWS FLASH!!! "Tough Gal" lives! This five-year old Marmot, thought to be dead since the winter of 95/96, was found in May 1997, living 800 meters from where she was born at Pat Lake. But, alas, she appeared to be all alone at this new clearcut site. We must therefore wait to learn if she finds a mate and produces her first litter! [*"Tough Gal" had been adopted by the Club in 1995. After she disappeared "Meanie" became its 'adopted' marmot*]

The New Perpetual Nature Calendar

A new "calendar committee" was struck in the spring of 1997, consisting of Bill Merilees, Colin Bartlett, Elthea Dale and Joe Materi. At first the group had planned to simply "update" the Club's original Central Vancouver Island Perpetual Calendar but decided instead to create a completely new one. (After 10 years it was time to produce a new issue). The new calendar would include a different theme for each month, as well as an interactive section of 'things to do' and space for 'things to record'. The subject matter would also be expanded to include local species from Victoria to Courtenay-Comox on Vancouver Island.

The Vancouver Natural History Society was approached (and agreed) to share the cost, use the same format, and where appropriate, the same art work, for a 'Lower Mainland Edition'. The committee also decided that distribution of the calendar would have to be through a commissioned sales representative, rather than club volunteers so that several thousand could be ordered at once. The proceeds from the sales would be ear-marked by the Club membership each year, for special projects and local 'causes'. (Buttertubs Marsh, V.I. Marmot research, etc.)

The Chase River Project

In mid 1996 the Nanaimo Field Naturalists were among more than 50 groups throughout Vancouver Island and the Lower Mainland to receive provincial grant money to participate in "Save B.C. Salmon" projects.

The club received \$9,600 to develop education programs to increase public awareness and to promote stewardship activities on the lower reach of the Chase River. The provincial government considered that local governments and community groups were the only ones that could effectively take responsibility for protecting local salmon spawning areas.

In the spring 1997 Newsletter Charlene Lee reported that: "In early 1996 the Club's Executive and the 25th Anniversary Committee decided that the Club would adopt the Chase River as a project to both commemorate the 25th anniversary year and give something tangible to the Nanaimo community.

"The Chase River is one of Nanaimo's urban streams that still has some Coho and chum salmon, although steelhead, cut-throat and rainbow trout have also been recorded there in some years. The stream has been stocked annually with about 125,000 Coho fry from the Chase River Hatchery operated by Malaspina University College. Adult salmon returns have been variable over the past two decades, maintained at least partially through stocking. As a result, the remaining natural production capacity of this stream, after impacts of urbanisation, appears uncertain.

"The Chase River upper watershed is part of the City of Nanaimo Waterworks and is relatively undisturbed, but the lower river flows through heavy to moderate residential development below the Colliery Dam, resulting in loss of riparian (streamside) vegetation, bank destabilisation and loss of instream habitat in some of the lower sections. With twelve storm drains discharging into the Chase River, potential future impact from increased storm water volumes, sedimentation and increased concentrations of metal and petroleum compounds are also likely to occur.

"The club hired two students (Susan Low and Mia Parker) from Malaspina. They confirmed that streamside vegetation had been lost and/or degraded in about 20 different areas along the lower Chase River. They then developed a 'landowner contact manual' which contains suggestions on how to approach landowners along the river, to explain the importance of the River as a fish-bearing stream, and the restoration of its streamside vegetation. The two students also recorded types of trees and shrubs present at the degraded sites, bank stability, width of riparian area and degree of habitat disturbance. Many rolls of film were used to show examples of what streamside vegetation should be like, and in other cases, the severe disturbance with only a few isolated trees or shrubs, lawns etc along the stream bank.

"A brochure will be developed detailing the importance of the Chase River as a fish habitat and the importance of streamside vegetation. We are also planning to purchase native riparian species of trees and shrubs for use where

landowners are agreeable to restoration plantings along their sections of the River, as well as collecting and analysing water samples throughout the year."

Buttertubs Marsh History (Arline Haddaway)

[Ed. Note: Arline interviewed long-time Nanaimo residents Mabel Witta and Bill Morrell and searched through documents in the Nanaimo Museum archives to get some idea of the history of this area. She believes much more research is required.]

At some unknown date in the past, the Hudson Bay Company acquired from the First Nations people, a large tract of land in the vicinity of Nanaimo which included the area we now know as Buttertubs Marsh. In 1862 HBC sold the land to the (New) Vancouver Coal Company which in turn sold it, in 1902, to the Western Fuel Company.

By 1909 the Western Fuel Company had divided the land into 5 acre lots for their miners to purchase. The only parcel not sold was the "company farm". Mr. R. Witta worked for the Company until the mine closed in the late 1920s. His job was to plow the "company farm" to grow hay for the mine's horses and mules. The Lombardy poplars and English oaks were planted as boundary markers around this time.

During the winters of the 1930s and 40s the young people of Nanaimo used the flooded fields to skate on. They often built bonfires near a barn owned by Mr. Scott, the dairy farmer who owned the land adjacent to the "marsh". During the War years of the 1940s tank training allegedly took place somewhere in the

vicinity, but the area we call Buttertubs Marsh today was not part of it.

A local Nanaimo lawyer, Mr. McIsaac, wanted to build a subdivision on the land. One day in 1974 while having coffee with his old friend Bill Morrell (of Morrell Sanctuary), the two men came up with "Buttertubs" as a name for the proposed subdivision. Buttertubs is a famous site in the Yorkshire Dales of England where Mr. Morrell's mother had lived.

While the subdivision proposal was ultimately rejected by the Ministry of the Environment, the name "Buttertubs" stuck. It should be noted that research to-date has not turned up any factual material as to whom the Western Fuel Company sold its holdings (the "company farm") or what portion of the land was indeed owned by Mr. McIsaac.

The year after Mr. McIsaac's proposal was turned down, the Second Century Fund (later renamed The Nature Trust of B.C.) purchased the 17 Ha. of marsh and uplands, in 1975, although the name of the former owner Nature Trust purchased the land from is not known. Much more searching into land titles, transfers and deeds is needed to complete our sketchy knowledge of this period.

In 1976 Ducks Unlimited, in cooperation with the Heavy Equipment section of Malaspina College, constructed a dyke along the Millstone River and installed water control structures.

They also excavated open water areas in the dense cattail growth to create more favourable interspersions of cover and open water. The excavated soil was used

to construct nesting islands and "loafing" bars for the waterfowl.

The Marsh was officially opened to the public in 1977. In the winter of 1983, flooding caused extensive damage to the City-owned western dyke, so a spillway was built to accommodate future floods.

In 1984 Ducks Unlimited Canada and the Habitat Conservation Fund combined efforts to further improve the marsh environment. They drained the marsh, excavated 600 meters of ditches, constructed four more nesting islands and began work on the construction of the viewing tower.

In 1985 the Nanaimo Correctional Centre completed the viewing tower and a summer works crew completed the trail system at the south end of the property that had been started three years earlier.

In the winter of 1987 floods again hit the area, overtopping all the dykes. This meant follow-up work on the Ducks Unlimited dyke and spillway area were needed.

The Nanaimo Correctional Centre got busy again in 1989 and brushed 300 meters of dyke to provide grazing for moulting geese and goslings. They resurfaced 700 meters of trail and dyke top; constructed 600 meters of new trail; installed eight new benches for the tired public; and re-stained the viewing tower.

An Environmental Youth Corps team was also hard at work that summer, marking the southern property boundary, and building five pedestrian 'pass-thru's.-

and three culverted bridges. They removed 17 wood duck nesting boxes which were in various stages of disrepair and replaced them with 13 new boxes. They also transplanted about 60 trees and shrubs to provide screening along segments of the new trail.

In 1991 - 92, several members of the club conducted a year-long bird survey of both Jinglepot and Buttertubs Marshes. There were three teams, led by Graham Gillespie, Rick Ikona and Steve Baillie and, with their companions, they completed 45 counts during the year. The final tally was 139 species and more than 24,000 individual birds recorded.

As noted on pages 125-127, the Nanaimo Field Naturalists, while having an interest in and supporting the work of the Marsh almost since its beginnings in the mid-70s, have taken a more pro-active role in its management and ongoing maintenance since 1995.

At the Club barbeque in June 1997, Arline announced that she would not be staying on for a second year as President. Someone else will therefore have to be found, to preside over the Club's affairs as its members begin their 'naturalist' journey into the next quarter of a century, and hopefully, beyond.

To end this chronicle the financial statement which began our 25th year is included here as a comparison to the club's first budget noted on page 8. It's been a long road from \$85. to \$19,000!

INCOME:

Memberships	864.00
Bank interest	7.09
Table sales-calendars, checklists, t-shirts	139.00
FBCN Meeting & Room rental	258.29
Coffee	20.00
Banquet - (940.00 less \$100.00 refunds)	840.00
Raffle tickets	<u>332.00</u>

Total

\$ 2,460.38

EXPENSES:

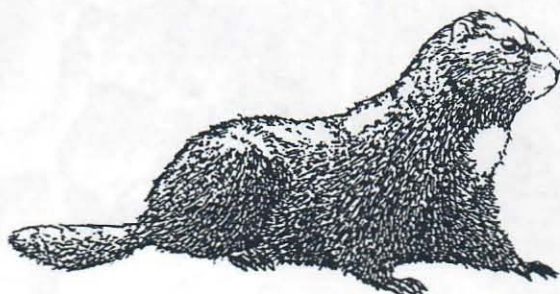
City of Nanaimo - Meeting room FBCN 1997	228.54
City of Nanaimo - Projector rental	10.70
Lasting Impressions (Pins for resale)	402.24
Urban Salmon Habitat account (wages)	1,080.00
Canadian Nature Federation dues	40.00
FBCN Island Region dues	40.00
Elthea Dale - 25th Anniversary expense	40.33
Newsletter (printing, labels, postage)	201.24
Audobon Society (Bird count)	157.00
UBC Press (Birds of B.C.)	85.60
Misc - photocopies, sympathy card	19.84
Banquet	897.48
Honorarium (A. Bryant - banquet speaker)	30.00
Nanaimo Land Use meeting (sponsor: C. Lee)	25.00
Bank service charges	<u>3.75</u>

Total

\$ 3,261.72

Total Assets:	Chequing account	\$ 15,877.56
	Term Investment	3,500.00
	Petty Cash	55.41
	Floot	30.00

TOTAL \$ 19,462.97





Dec. 1976 After the Christmas Bird Count. L to R.: Brian & Mary Ann Wilkes, Peter & Anneke, Ken & Gloria Knowles, Dave & Mrs. Richards, Coral & Dave Denis



Fall 1978. Qualicum Falls weiner roast. Some folks pictured from l. to R: Anneke Van Kerkoerle, Al Hawryzki, Kelly Knowles, Barbara Hourston, Gloria Knowles, Ray Roy, Barbara Graves, Coral and Dave Denis.

THE PHOTO GALLERY



1981 Wood Duck /Hooded Merganser nest box erected near Mallard Lake on Newcastle Island in memory of Club member Gordon McKibbin.

THE PHOTO GALLERY



Dec. 1981 Pre-CBC warm-up. Miss Colen Hansen, Bill Merilees, Vera Riddell, Sandy Shaw, Rick Ikona, Peter Van K. Derrick Connelly, Andrew Merilees (center tripod)



Derek Connelly 1982.



Al Clemens at Woodley Ridge, Ladysmith Bluffs 1983

THE PHOTO GALLERY



April 1983, Bamfield Trip. Bill Merilees with Betty McIsaac and Flo Clemens.



Summer 1984, Peter van Kerkoerle and Rick Ikona on Green Mountain.

THE PHOTO GALLERY



Fall 1985. Hotdog roast at Little Qualicum Falls: Tony Thompson and Rick Ikona keeping warm by the stove. At the table: Lynne Wright, Betty McIsaac, Anne Thompson and others enjoying their picnic lunch.



May 1986, Karen Mullen, Flo Clemens and Jill Sims with Bill Van Dieren in the Somass Delta, Port Alberni.

THE PHOTO GALLERY



June 1986 Barbeque at Van Kerkoerle's asparagus farm. L to R: Bill English, Peter Van Kerkoerle, Don Blood, Al Clemens facing Ed Barraclough (back to camera).

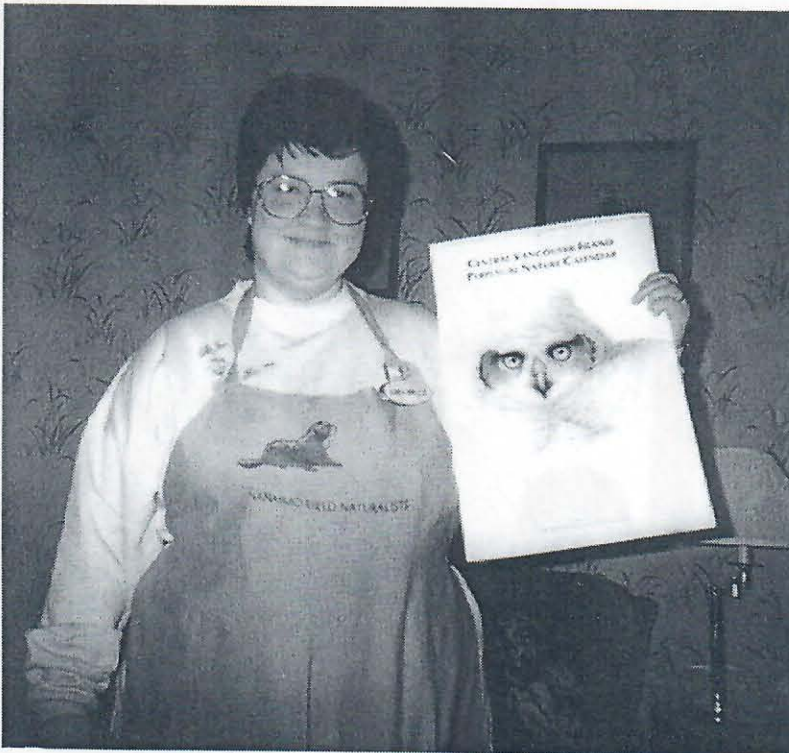


1988 Carmanah Valley. Joan Edwards, Colen Hansen, Colen's dad Larry Hansen (leader), and others

THE PHOTO GALLERY



The MV Clavella chartered for the Club's Sea Lion Cruises in 1987 and 1988



Kanya Baillie modelling her Table Sales Apron and showing off the Club's first Perpetual Nature Calendar

THE PHOTO GALLERY



Heritage Oak tree at Nanaimo River Flats. circa 1987-88.



1988. Kate Hall and Vera Riddell off Ucluelet on the Canadian Princess

THE PHOTO GALLERY



Dec. 1990. After the Christmas Bird Count, another cozy evening around the Van Kerkoerle's fireplace. Back Row: Colen Hansen, Sandy Shaw, Steve Baillie, Graham Gillespie, Rick and Katherine Ikona, Jill Sims. Front Row: Kanya Baillie, Darlene Gillespie, Mary Barraclough, Joan Edwards, Kate Hall and Peter Van K. Photo by Anneke Van Kerkoerle.



Gordon and Rene McLean

THE PHOTO GALLERY



May, 1992. Pitch-In and Clean Up of Jingle Pot Marsh. Graham Gillespie and Steve Baillie hard at work.



Examining an abandoned fridge - home to a nest of hornets - and one of the objects in the several metric tons of garbage they removed from Jinglepot Marsh.

THE PHOTO GALLERY



"Now this is comfort! I wonder if Darlene will let me keep it."



June 1992. Trip to Mitlenatch Island on the Bonnie Belle. L to R: Kathy Jackson and Jill Sims. Kanya and Steve Baillie (centre), Joan Edwards. Photo by Elthea Dale.

THE PHOTO GALLERY



June 1992, Mitlenatch Island trip Kanya Baillie and Kathy Jackson consult their botanical guide book.



June 1992, Mitlenatch Island. Jill Sims and Joan Edwards (left) talking with the Island volunteer wardens.

THE PHOTO GALLERY



Feb. 1993. Annual Banquet at Yellowpoint Lodge. L to R: Bill Merilees (President), Anneke and Peter Van KerKoerle receiving the Club's Honourary Lifetime Membership Award, presented on behalf of the Nanaimo Field Naturalists by guest speaker, Robert Bateman.



Robert Bateman, Jill Sims and Bill Merilees.

THE PHOTO GALLERY



Feb. 1993: Eleanor and John Routley, and Alison Cookson



Feb 1993: Birgit Bateman, Bill and June Merilees

THE PHOTO GALLERY



Feb. 1993. Banquet at Yellowpoint Lodge. Sid Vinar, Rina Samson and Jean Vivian.



Feb. 1993. Graham and Darlene Gillespie and Elthea Zule.

THE PHOTO GALLERY



January 1993 Robert Bateman and President Bill Merilees presenting a T-shirt to Past President Graham Gillespie at the annual banquet,



January 1994. Bill Merilees proudly displays his certificate of honorary life membership presented to him by the Nanaimo Field Naturalists

THE PHOTO GALLERY



March, 1994 Bird Bungalow Building Bee at Bill Merilees'. L to R: Arline Haddaway (facing), Elizabeth Roe(back), Joan Greenhorn & Steve Goh (working), Kanya Baillie, Joy Christian, Gordon Bell (talking).

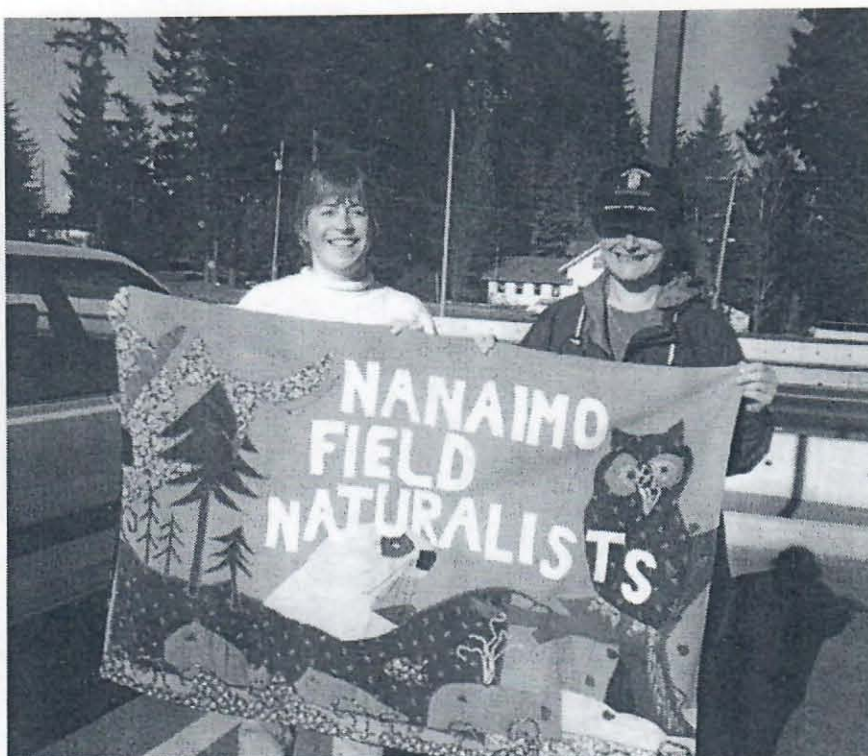


May 1995, Bird Outing. L to R:(foreground) Jack Wilkinson, Bruce Cousins (binocs), Steve Baillie, Mieke Smits Van Ham

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May 1995 Morrell Sanctuary. First Annual plant sale. Adrienne Thomson and Ida Welland "sales clerks"



Katherine Ikona and Karen Mullen holding the Club banner.

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Jan. 1996. Banquet. Elaine Dally, Peter Driedger, Steve Wawrykow, Margie Bryant, Colin and Denise Bartlett



Jan. 1996: Some of the ladies of the Club: Gwen Johnston, Kate Hall, Jean Garside, Elaine Waddell, Mieke Smits van Ham, Hazel McNish and Ida Welland.

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1997 25th Anniversary Banquet. Back Row: Harry and Marion Coles, Sandy Shaw, Jill Sims, Jean Garside, Esther Stemp. Front: Joan Greenhorn (standing), Molly Byrne and Alison Shaw (kneeling).



1997 Banquet at Yellowpoint Lodge: Steve and Vi Wawrykow, Sid and Jean Vivian, Rina Samson, Graham Gillespie, Katherine Ikona. Front (Kneeling): Margaret Taylor and Darlene Gillespie

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OUR PAST PRESIDENTS



Jan. 1997. 25th Anniversary Banquet at Yellowpoint Lodge. Left to Right: Dave Richards (1977-78), Don Blood (1985-87), Arline Haddaway (1996-97), Graham Gillespie (1990-92), Steve Baillie (1987-89), Bill Merilees (1981-82) & (1992-94), Mollie Byrne (1975-76). Front: Joan Edwards 1989-1990), Charlene Lee (1994-96). Missing: Dave Kerridge (1972-75), Brian Wilkes (1976-77), Rick Ikona (1983) and Kim Goldberg (1979-80) & (1983-85)

Areas of Natural History Interest in Greater Nanaimo

[Editor's Note: The following areas were proposed for protection on behalf of the Nanaimo Field Naturalists by the President, Bill Merilees in 1993]

Dodd Narrows - False Narrows areas including the adjacent **Vancouver Island, Maude Island and Gabriola Island (Brickyard Beach)**: This area is very rich in marine life and marine habitat due to the contrasting substrates and tidal velocities. There is also an open field area rich in ephemeral spring flowers located inland to the east of Dodd Narrows.

The Gabriola Island Cliffs facing Northumberland Channel is a Peregrine Falcon nesting area. It is also home to late winter Bald Eagle concentrations (980 counted on February 7th 1993). Unique rock formations of fretted sandstone, and rock plant communities are on the Cliff area from the Hogan Lake outfall on Gabriola Island to the south end of Descanso Bay and from the subtidal area to the top of the Cliff edge.

The Malaspina Galleries is a geological formation made famous through the Spanish exploration visit of Capitanos Galliano and Valdez in 1792 and should become part of Gabriola Sands Provincial Park. This formation has international historical significance and national geological significance.

Snake Island, Five Finger Islands and Hudson Rock. This area should be made an ecological reserve for the protection and study of marine life, seabird and pinniped biology and spring flora. The area should be protected to a depth of 20 metres. Snake Island is sandstone contrasting to the other islands which are volcanic in origin.

Buttertubs Marsh and adjoining wetlands including a minimum 20 metre strip each side of the Millstone River. The integrity of this Marsh and riparian area requires protection as a unit.

The Shack Islands and stands of Garry Oak to the north at **Neck Point** are worthy of protection for community purposes.

Yellow Point Meadows contains shallow soils and the spring flowers (e.g. Yellow Point Flower Trail) these support are worthy of a place in the protected habitats of the greater Nanaimo area. This area is in the Cowichan Valley Regional District.

The Woodley Range is habitat to the only known location in Canada of *Lotus pinnatus*. This site is also in the Cowichan Valley Regional District.

The Nanaimo River Estuary should be formally protected, including an area off the delta to a depth of 20 metres.

Diver, Brannen and Green Lakes. A 20 metre shoreline leave strip, inland from the natural high water level, is required to protect the natural processes and integrity of these water bodies.

Nanosee Hill and the DND Lands west to Wallis Point requires ecological reserve status to protect Garry Oak and wildflower meadows, as well as Old Growth Douglas Fir forest.

Rhododendron Lake is one of possibly only two or three sites where *Rhododendron macrophyllum* grows in a natural state on Vancouver Island. The area is owned by MacMillan Bloedel and is reported to be an 'ecological reserve' but this appears to be at the whim of the company. **Ferguson and Barnaby Swamps** to the East and Southeast of Rhododendron Lake respectively should be included as part of this overall area.

Appendix I

Green Mountain, Ridge and Mountain System is the stronghold area of the Vancouver Island Marmot population estimated at not more than about 200 animals. *This is the world population!* Green Mountain and the ridge systems, including the saddle to Butler Peak that spreads North at least to Mount Arrowsmith and Douglas Peak near Port Alberni, and South to Cowichan Lake and West to the limit of the Nanaimo Regional District, needs to be protected in its natural state as a wildlife management area. This proposal would allow natural dispersal corridors to link existing Vancouver Island Marmot populations. It would mean a large mosaic needs to be considered for preservation. Included in this system would be the subalpine peaks and ridges of 'P' Mountain, Minna's Ridge, Nit Peak, Nat Peak, and Mount Moriarity etc. Although this is of National and Provincial importance, it should not be overlooked in a Regional Park plan.

The Nanaimo River Corridor: This area from tide water to the Western boundary of the Nanaimo Regional District needs careful evaluation and study of its community R&R values. **Buffalo Hump** should be part of this consideration.

Fossil-bearing sediments in all the creeks that drain East into Georgia Strait cut through sedimentary shale deposits, many of which are fossil bearing. An inventory of these creek/shale intersections is required and these areas protected.

Dudley Swamp and Hamilton Swamp need to be included as a study area. This area has unique natural history values and rare species notably the Water Shrew *Sorex palustris*.

Blackjack Ridge is a RDN Study Area, but **Blackjack Lake and Swamp** should be included. The Ridge has a notable stand of the shrub Manzanita *Arctostaphylos columbiana*.

Harewood Plains contains many geological formations and petroglyphs of considerable interest. This areas' floral associations, Turkey Vulture nesting, and bat roosting/maternity habitat, and the marsh areas provide exceptional natural history values. Detailed study to document these values is required.

Boat Harbour, Hemer Provincial Park and the South Wellington Cedar Link need to be considered as a corridor unit.

Winchelsea-Balenas Island groups require protection for their flora associations and for general community recreational values. This includes the non alienated islands of Ada Island, Brickyard Bay, and Mistaken, Gerald, Douglas, Amelia, Yoe, Ruth, Southey and Maude Islands.

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The Nanaimo River Estuary

[Editor's Note: The following was written by club member Dr. David Narver in 1973.]

On the East coast of Vancouver Island estuaries range from the Big Qualicum type, where essentially the river runs across the open beach, to the Nanaimo and Cowichan River type, which is well protected with extensive alluvial deposits, major sedge marshes and large eelgrass communities. Of the eight or so estuaries on the East side of Vancouver Island that fit this general classification, the Nanaimo is probably the largest and least changed.

The intertidal zone is about 2,000 acres. Nearly one-fifth is sedge meadow and other grassland. The area is intertwined with tidal channels which contain water even at low tide. Much of the upland near the river and adjacent to the maximum high-water level is diked pasture land that in the late fall and winter is covered in many places with standing water. Most of the tidal and river channels in the estuary have gravel substrates, but the rest of the Estuary has a substrate ranging from soft silt to firm silty-sand. Eelgrass beds are found in the Holden Lake channel in the Southeast corner of the estuary and in most of the outer one-fourth of the Estuary North of the active booming grounds between the assembly wharf and Jack Point. Throughout the booming grounds there is no vegetation; the bottom is mainly silty-sand with accumulations of bark and many sunken logs. Aerial photographs indicate that the major tidal and river channels have remained essentially stable over the last 30 or more years.

Prior to 1948 eelgrass was abundant in about two-thirds of the 2,000 acre estuary. At that time the estuary was essentially undisturbed except for some industrialization (lumber and coal shipping) in the Northwest corner and some possible downstream effects from coal mines and logging. At least three coal mines operated in the Nanaimo River watershed during the early 1900s. Effluent from washings went back into the river in all cases. Also by 1948 much of the lowest 10 miles of the watershed including Haslam Creek, had been logged.

Environmental Changes

The major environmental change in the Nanaimo River Estuary has been the intensive log booming initiated in 1948 and continuing to the present. As a direct result, the eelgrass community has been almost entirely eliminated from the middle part of the Estuary. An environmental change concurrent with booming, and one that is likely to have an impact on the estuary, is the extensive clearcutting of the Nanaimo River watershed. At present nearly 70% of the watershed has been logged. In addition, considerable gravel removal occurred during the early 1960s.

The Nanaimo River Estuary(Cont'd)

Waterfowl

Even in its present, somewhat deteriorated condition, the Nanaimo River Estuary is extensively and intensively used by waterfowl in the fall, winter and spring. In late fall and winter the common species are Pintail, Baldpate, Greenwing Teal and Mallard among the puddle ducks, and Golden-eye, Bufflehead, Greater Scaup, American Merganser and Hooded Merganser among the diving ducks. In early October only the puddle ducks and the Mergansers are present as most of the diving ducks are later migrants. Occurring occasionally or in small numbers are Trumpeter Swan, Canada Goose subspecies White-fronted Goose, Lesser Snow Goose, Black Brant, Gadwall, Shoveller, Lesser Scaup, Canvasback, Old-Squaw, Harlequin Duck and Ring-necked Duck. During the last two years a dozen Trumpeter Swans wintered in the Estuary. In the late fall over the past six years, daily concentrations of ducks numbering from a few hundred to over 1,000 (Pintail and Baldpate) have been counted. The fall and winter populations vary from 500 to several thousand.

The major factor affecting species composition and numbers of ducks on the Estuary at any time, is the condition of the surrounding lakes and fields. In early fall before standing water accumulates on the fields, most ducks are on the Estuary. After a period of heavy rain when the fields are flooded, relatively few puddle ducks are using the Estuary. But when, as in the 1967/68 and 1971/72 winters, the surrounding lakes and fields are frozen solid and covered with snow, the Estuary contains most of the ducks in the country. The Estuary is probably more important to the welfare of waterfowl under these latter conditions than at any other time.

During the first half of the 20th century, the Nanaimo River Estuary was famous from Vancouver to southern California as an excellent waterfowl area. The extensive eelgrass beds attracted and held thousands of ducks and Black Brant. Anytime during the fall and winter (according to the old-timers I interviewed), one could put to flight thousands of ducks by rowing from the present assembly wharf area across to the sand bar in mid-Estuary. Black Brant were so abundant and noisy they kept people awake during February and March nights. Heavy concentrations of waterfowl still occurred in the Estuary after the War until log booming commenced. By the early 1950s the number of waterfowl using the Nanaimo River Estuary had declined noticeably. It is generally felt that the abrupt decline was related to destruction of a large portion of the eelgrass beds.

0 0 0 0 0 0 0 0 0 0 0 0

[Editor's Note: In 1996, the Nature Trust of B.C. added 59.3 acres of Holden Creek land to its Nanaimo River Estuary holdings. This land is situated on the Estuary's east side. The purchase was co-funded by Ducks Unlimited and the B.C. Government. The Pacific Estuary Conservation Program (PECP) and Nature Trust are working jointly to maintain habitat diversity on the property.]

Vegetation of Buttertubs Marsh

During the summer of 1977 a survey of vegetation was carried out by Donna Bohoslowich (team leader), Debra Lebrocq and Courtenay Hook. The survey was funded by a Young Canada Works government grant under the sponsorship of the Nanaimo Field Naturalists. At the end of their study the team recommended a year-round observation of vegetation on a seasonal basis; a comprehensive investigation of insects, reptiles and amphibians; and accumulation of flowering dates for various plant species over several years. In 1982 another study was carried out by the Ministry of Environment. The following list of plant species is a combination of the two surveys neither of which were considered comprehensive by the participants.

The plants are grouped by habitat: Aquatic, Semi-aquatic, Roadside, and Upland Grass. Names follow *The Vascular Plants of British Columbia* Vols. 1-4 1989-1994.

An asterisk (*) indicates an introduced species.

Aquatic Community

Pond water-starwort
Yellow marsh-marigold
Common Hornwort
*Yellow Iris
Common Duckweed
Star Duckweed
Yellow Pondlily
*White Waterlily
Water Smartweed
Closed-leaved Pondweed
Floating-leaved Pondweed

White Water buttercup
Narrow-leaved Bur-reed
Great Duckweed
Common Cattail
Greater Bladderwort

Semi-aquatic Community

Musk-flower
Creeping Buttercup
Sedge (*Carex* spp.)
*Common watercress
Hardstemmed Bulrush
Hooker's Willow
Hardhack

Roadside Community

Yarrow
Red Alder
Pearly Everlasting
Arbutus
Chickory
*Canada Thistle
Common Sow-thistle
Red Osier Dogwood
*English Hawthorn
*Scotch Broom
*Wild Carrot (Queen Anne's Lace)
Fireweed
Willowherb spp.
Common Horsetail
Wild Strawberry
Puget Sound Gumweed
*Common St. Johnswort
*Hairy Cat's-ear
*Wall Lettuce
Pacific Crabapple
*Pineapple Weed
Pacific Ninebark
*Ribwort Plantain
*Common Plantain
Black Cottonwood
Douglas fir

Vegetation of Buttertubs Marsh

Nootka Rose
Thimbleberry
Himalayan Blackberry
Trailing Blackberry
Garden Sorrell
*Curly Dock
Pacific Willow
*Tansy Ragwort
*Common Tansy
*White Sweet-clover
*Red Clover
*Small hop Clover
*Corn-spurry
*Common Vetch
*Tufted Vetch
American Vetch
*Common Stork's-bill
Scarlet Pimpernel
*Corn Chamomile
*Bladder Campion
Common Snowberry
Saskatoon
Oceanspray
Oregon-grape spp.
Kinnikinnick
Western Redcedar
*English Red Oak
Red Elderberry
*Lombardy Poplar

Upland Grass Community

*Domestic Mustard
*Indian Mustard
*Hedge Mustard
*Orchardgrass
Aster spp.
*Oxeye Daisy
*Sweet Vernalgrass
*Common Velvet-grass
Big-leaved Lupine
*Alfalfa
Wood Forget-me-not
*Reed Canarygrass
*Common Timothy
*Fowl Bluegrass
*Rattail Fescue
*Perennial Ryegrass
Spike Bentgrass
*Kentucky Bluegrass
*Wild Radish

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[It would be useful to have an up-dated survey which includes flora that has found its way into the Marsh over the past 15 years, such as creeping dogbane and purple loosestrife, etc. Purple loosestrife was first found there in 1992]
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	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	occurrence	max	min
Red-throated Loon	2	13		12	4	7	12	1		3		6			2	2	2	2	2	2		4			31	16	31	0
Pacific Loon	17	27	4	8	15	71	2	24		57	12	42	34	20	36	26	39	48	29	27	13	107	53	103	530	24	530	0
Common Loon	7	16	29	18	26	42	21	28	42	82	20	44	50	34	30	43	50	71	38	72	61	61	57	95	119	25	119	7
Yellow-billed Loon						1														1						3	1	0
Pied-billed Grebe		6	2	4	4	17	1	10	10	14	16	14	18	14	11	11	10	22	19	8	10	12	2	5	17	24	22	0
Horned Grebe	20	17	87	104	67	200	63	83	95	114	67	69	53	49	39	92	58	77	44	76	49	146	57	95	185	25	200	17
Red-necked Grebe	19	25	17	66	50	42	17	43	65	75	7	17	16	19	16	18	30	20	16	19	19	99	10	6	39	25	99	6
Eared Grebe		1	1	8	13	1	5	18	6			1			1										1	11	18	0
Western Grebe	205	905	377	41	160	984	54	45	306	22	261	129				674	2079	1235	438	359	1503	263	1015	533	1186	22	2079	0
Double-crested Cormorant	20	17	128	28	56	40	35	81	38	83	76	146	43	34	70	216	1089	181	64	114	211	145	174	110	2072	25	2072	17
Brandt's Cormorant	7	28	29	51	48	51	8	39	29	34	5	84	4	6	34	1364	2066	2943	811	2337	1984	52	1679	175	1342	25	2943	4
Pelagic Cormorant	10	36	62	85	57	94	33	44	56	79	84	115	41	81	496	1826	3233	1095	1273	1062	348	254	172	171	349	25	3233	10
American Bittern								1	1	1	2		2	2	3	1						1	CW	1	1	11	3	0
Great Blue Heron	12	14	40	49	27	40	8	46	74	31	25	30	18	29	22	30	39	51	33	40	35	43	26	40	76	25	76	8
Tundra Swan			4												1	1						7	6	8		6	8	0
Trumpeter Swan	23	14	28	36	50	75	81	104	114	154	243	214	221	193	119	326	186	164	176	159	109	189	163	253	396	25	396	14
Gr. White-fronted Goose							1	10					1	1						4						CW	5	10
Snow Goose										1																	1	1
Brant					3																						1	3
Canada Goose	5	4	47	56	54	191	98	285	310	347	608	92	254	79	354	163	508	197	647	669	543	489	438	383	697	25	697	4
Wood Duck	3		8	1	2	10	10	24	20	7	6				2	1		3					CW			1	14	24
Green-winged Teal	32	77	13	46	38	61	3	61	87	129	16	28	28	82	24	89	25	188	23	187	38	149	149	63	61	25	188	3
American Black Duck																					10	16	23	23	10	9	6	23
Mallard	197	108	194	311	296	822	354	535	538	423	770	774	648	690	268	748	542	578	900	1120	756	1687	846	1247	2051	25	2051	108
Northern Pintail		396		61	126	31	3	11	19	42	14	43	4	1	5	208	27	118	37	133	113	52	154	37	208	23	396	0
Northern Shoveler				8	4	2	36	3	3	16	17	18	20	37	22	47	40	22	32	10	20	5	10	9	3	22	47	0
Gadwall								4	7	3	10	3			5	11		6		11	19	23	30	52	15	14	52	0
Eurasian Wigeon				2			1		1	1			4	1		5	4	3	1	1	1	1	1	2	1	16	5	0
American Wigeon	50	618	509	312	602	487	217	206	217	899	280	2008	504	349	148	903	993	712	430	1146	645	1211	993	796	2206	25	2206	50
Cinnamon Teal										3								8									2	8
Redhead										1											1						2	1
Ring-necked Duck	3	38	33	9	11	37	36	7	61	43	3	15	90	54	23	27	24	10	11	48	73	70	59	42	17	25	90	3
Greater Scaup		265	83	246	94	112	63	33	13	34	57	61	60	50	8	28	10	12	17	28	2	1	55	82	218	24	265	0
Lesser Scaup	155	234	30	71	62	197	58	102	43	38	21	26	16	23	18	31	31	18	5	4		3	4	18	2	24	234	0
Harlequin Duck	20	17	48	39	50	72	43	32	67	65	54	47	20	15	23	66	25	63	22	58	80	84	40	87	153	25	153	15
Oldsquaw			6	15	55	9		7	15	8	21	12	6		11	1	3	13	40	19	3	13	1	4	2	21	55	0
Black Scoter	35	9	134	57	280	75	14	101	16	66	15	10	7	11	1	211	93	13	51	119	10	21	2	6	16	25	280	1
Burl Scoter	16	142	283	925	1943	605	216	235	384	265	79	493	208	103	213	463	633	605	632	670	367	449	1009	305	901	25	1943	16
White-winged Scoter	23	18	82	54	88	16	39	44	17	42	21	25	7	14	7	14	45	24	2	7	3	11	40	38	14	25	88	2
Common Goldeneye	65	70	78	95	139	100	113	123	134	188	106	121	174	191	76	213	175	74	41	144	89	272	131	179	252	25	272	41
Barn's Goldeneye	9	42	138	206	2016	255	116	137	114	136	535	150	217	161	569	413	348	344	220	299	655	368	886	275	732	25	2016	9
Bufflehead	82	230	215	197	111	157	136	132	102	304	153	164	167	143	82	269	223	226	137	337	261	267	359	294	523	25	523	82
Hooded Merganser	3	4	10	22	9	20	8	21	40	38	8	14	8	21	16	37	29	36	25	28	97	83	90	60	110	25	110	3
Common Merganser	19	15	39	111	93	89	50	119	113	138	81	105	72	44	23	136	45	140	59	111	343	239	431	186	228	25	431	15
Red-breasted Merganser	15	27	21	89	36	86	61	58	61	63	80	81	51	53	49	37	192	170	145	231	114	157	221	247	240	25	247	15
Ruddy Duck		8		1	1	14		10	11	19	12	17	5			1	4	7	5	1	2		1				17	19
Turkey Vulture																											1	1
Bald Eagle juvenile			15					23	49	33	27	50	41	43	21	147	85	107	77	98	72	65	41	18	84			
Bald Eagle Adult			11					24	32	28	16	36	31	16	15	86	93	49	71	115	160	81	118	65	160			
Bald Eagle unknown	13	32	15	72	46	59	44	13		13					1	8		4				25	3		70			
Bald Eagle Total	13	32	41	72	46	59	44	60	81	74	43	86	72	59	37	241	178	160	148	213	232	171	162	83	314	25	314	13
Northern Harrier	5	1	1	1	4		1	4	4	4	4	1	3	1		1			1	2		1	4	CW	4	19	5	0
Sharp-shinned Hawk		1		5	4	3	1			1		6		2		1	1			1	2	5	1	2	5	16	6	0

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	occurrence	max	min	avg	
Cooper's Hawk	5	1		5	5	2		1	5	3	2	2	6	2		3	2	2			2	1	2	CW	11	19	11	0	2	
Northern Goshawk		1											1	1		1			1						1	7	1	0	0	
Red-tailed Hawk	3	2	5	3	10	8	5	5	4	8	9	7	11	8	1	7	8	10	5	18	9	18	9	3	15	25	18	1	8	
Rough-legged Hawk																	1							CW	1	1	0	0		
Golden Eagle						1		1													1		1	CW	4	1	0	0		
American Kestrel		1			1				1												1	1	CW	CW	1	6	1	0	0	
Martin	1	5	3	1		1	2	1			1	1	4	1		1	1	2	1	2	2		2	4	5	20	5	0	2	
Peregrin Falcon	1			1	2		1		1	1								1	2	1	1	2	3	1	4	14	4	0	1	
Ring-necked Pheasant	26	3	4	16	11	31	15	32	13	7	8	19	8	11	11	14	4	7	2	10	3	9	13	8	35	25	35	2	13	
Ruffed Grouse	2	2	1	3	3	3		5	3	1	1	5			2	2	4	2	3	1	3	2	2	2	1	22	5	0	2	
California Quail			1						20		8	30	10	33	9	41	17	25	63	6	11	80	38	35	110	17	110	0	21	
Virginia Rail	1					1		2			2	5				7	3	1	10	20	16	5	15	9	11	15	20	0	4	
Sora													1													1	1	0	0	
American Coot	26	95	155	46	63	153	74	63	55	127	36	8	41	60	136	162	70	251	86	79	58	135	59	81	21	25	251	8	86	
Black-bellied Plover					2	1	12		1	5	8	19	4	4				1	42	20	15	69	8	84	53	18	84	0	14	
Killdeer	14	7	34	56	68	69	30	21	8	30	22	55	21	5	5	7	7	4	3	1	15	42	CW	3	84	24	84	0	24	
Black Oystercatcher	14	2	9	20	45	19	4	9	12	10	12	60	6	1	6	24	31	29	30	72	48	41	60	58	25	72	1	26		
Greater Yellowlegs			2	1							1							1				2		CW		5	2	0	0	
Spotted Sandpiper																		1	2			1				3	2	0	0	
Ruddy Turnstone												1											3			2	3	0	0	
Black Turnstone	44	9	145	41	62	75	8	12	20	167	262	197	19	2	3	80	28	45	108	171	25	125	114	75	73	25	262	2	76	
Burbird			180		80	343			110	132	104	174	2	4			7	39	19	40	29	10	30	207	178	18	343	0	68	
Sanderling						1														3				1		3	3	0	0	
Western Sandpiper																				2						1	2	0	0	
Least Sandpiper																	1						2			2	2	0	0	
Pied-billed Sandpiper							3																2			1	3	0	0	
Rock Sandpiper									2		11					3		1	14	5			1	17	8	9	17	0	2	
Dunlin		280	81	150	100	72	446		2	14	2	43				6		22	112	225	25	140	25	85	271	19	446	0	84	
Common Snipe	11	5	11	25	2	7	2	8	1	35	1	4		3		2		8	1	2	3			2		15	20	35	0	8
Bonaparte's Owl					1						2	3															3	3	0	0
Mew Owl	15	331	91	71	348	101	34	184	64	186	578	324	86	22	293	630	626	137	144	127	90	192	897	563	271	25	897	15	256	
Ring-billed Owl	1			1		4										1		1		2	1	1	1	1	1	10	4	0	1	
California Owl					5													1		2		2		1		5	5	0	0	
Herring Owl	4	1	2	19		4	14	75	7	1	2	7	2		4	2		2	15	4	2		8	18	110	21	110	0	12	
Thayer's Owl							1		1	4	2	28		4	4	10	76	39	1375	523	1050	245	720	35	148	17	1375	0	171	
Western Owl																			2			2	1		1	4	2	0	0	
Glaucous-w. X West. Owl																						2				2	57	0	3	
Glaucous-winged Owl	3542	3492	3813	2136	3668	2995	2604	5919	4184	2024	3260	3960	6755	4748	8260	10066	12864	15543	9745	7168	6411	4349	3705	4393	5071	25	15543	2024	5628	
Glaucous Owl															1			2				1					3	2	0	0
Black-legged Kittiwake											1																1	1	0	0
Common Murre	10		4	1	12	114	2	76	42	4	49	126			8	37	40	76	3	169	59	44	3	111	92	22	169	0	43	
Pigeon Guillemot		6	5	9	50	5	2	4	3	4	3	28		3	10	16	4	15	6	6	1	1	3		6	22	50	0	8	
Marbled Murrelet	6	6	27	15	5	34	16	29	14	12	27	20		6	5	12	21	66	6	50	10	30	2	12	5	24	66	0	17	
Ancient Murrelet																						5				1	5	0	0	
Rhinoceros Auklet			1			2									1	10	4	5		57	9	20	10	6	10	12	57	0	5	
Rock Dove		172	32	165	91	208	245	319	207	144	184	172	188	357	131	151	375	254	276	275	284	266	255	209	452	24	452	0	216	
Band-tailed Pigeon	14	13		10	11	71	71	2	105	54	24	94		31		12	13	2	13	7	51	86	1	132	129	22	132	0	38	
Barn Owl																				2		1	1			3	2	0	0	
Western Screech-owl						4	1				1		1				1		1							6	4	0	0	
Great Horned Owl										1				2		1	2	1	2			2				4	8	4	0	1
Snowy Owl																									1	1	1	0	0	
Northern Pygmy-owl						1	1																		1	2	1	0	0	
Barred Owl																							1	1	1	CW	3	1	0	0

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	occurrences	max	min	avg	
Short-eared Owl	5	3		2	1	2		5	4	1			1			3		1				2		CW	6	13	6	0	1	
Northern Saw-whet Owl							1									1			1							3	1	0	0	
Anna's Hummingbird			1	2	1	3	3	3	3	3	2	4	5	2	1	1	2	3		1	1	5	4	4	5	22	5	0	2	
Belted Kingfisher	5	6	21	17	14	14	10	16	19	22	10	19	6	10	14	29	18	40	24	28	22	32	27	23	25	25	40	5	19	
Lewie Woodpecker						1																				1	1	0	0	
Red-breasted Sapsucker					1	2	10					8	2	1		2					2	2			8	10	10	0	2	
Downy Woodpecker	1	1	6	10	7	8	7	3	4		3	4	7	5	2	4	5	13	3	4	7	24	8	8	24	24	24	0	7	
Hairy Woodpecker		1	2	5	5	7	8	7	1	4	4	6	6	3		1	1	3	1	4	5	7	4	3	22	23	22	0	4	
Northern Flicker	20	52	28	67	62	67	23	31	45	16	44	30	24	26	6	20	28	30	27	45	47	98	43	89	109	25	109	6	43	
Pileated Woodpecker	6	1	6	9	20	10	9	2	6	7	4	8	6	8		2	2	5	2	9	9	18	3	9	17	24	20	0	7	
Horned Lark				3																						1	3	0	0	
Gray Jay			1																							1	1	0	0	
Stellar's Jay	8	22	23	30	20	46	27	35	45	47	5	83	42	13	11	50	25	25	38	13	126	37	52	21	213	25	213	5	42	
Northwestern Crow	797	1597	859	1098	1295	1692	1841	909	1454	1190	1634	1137	1381	1603	709	1648	1067	947	675	1420	690	595	485	580	995	25	1841	485	1132	
Common Raven	21	48	25	37	73	72	35	49	44	67	108	52	42	80	13	29	30	78	54	59	54	56	33	72	155	25	155	13	55	
Chest-backed Chickadee	112	192	145	102	156	164	188	273	175	126	123	146	144	197	89	206	121	135	246	232	167	289	201	215	405	25	405	89	182	
Bush tit	16		1	27	10	73	23	127	73	29	12	30	70	37	5	96	67	39	63	129	95	145	199	27	156	24	199	0	62	
Red-breasted Nuthatch		2	13	24	12	5	5	4	1	1	6	10	1	24	1	2	20	6	12	1	7	8	7	23	97	24	97	0	12	
Brown Creeper	6	4	7	10	6	12	5	14	9	11	5	10	8	6	4	4	5	9	7	9	12	22	5	6	45	25	45	4	10	
Bewick's Wren	6	9	11	20	17	17	23	16	28	14	19	22	10	4	5	21	12	11	5	25	11	31	6	12	48	25	48	4	16	
Winter Wren	18	20	20	15	24	44	41	18	22	46	34	58	31	22	7	22	18	27	44	19	39	58	16	34	108	25	108	7	32	
Marsh Wren	6	1			2	8	2	10	3	4	3	6	4	6	1	2	5	12	6	15	3	8	4	4	4	23	15	0	5	
American Dipper					2	1	5		1		3			1	2	1	3		1		3	CW			1	12	5	0	1	
Golden-crowned Kinglet	24	90	163	140	124	126	115	180	82	160	124	189	59	85	113	215	198	236	191	169	199	493	373	304	302	25	493	24	178	
Ruby-crowned Kinglet	10	25	4	4	14	30	22	12	14	12	9	5	8	1		8	23	14	15	12	10	18	5	23	18	24	30	0	13	
Townsend's Solitaire			1	1									1													1	4	1	0	0
Swainson's Thrush						1				1		1														3	1	0	0	
Hemlock Thrush																						1	CW			1	1	0	0	
American Robin	631	840	778	819	726	3312	284	422	941	609	507	941	151	417	348	650	348	329	1243	495	1764	821	259	898	745	25	3312	151	771	
Varied Thrush	15	15	62	58	19	110	29	1	6	35	22	37	3	13	14	38	77	7	12	15	79	34	39	96	337	25	337	1	47	
Northern Mockingbird									1																	1	1	0	0	
American Pipit								1	11			1							3							4	11	0	1	
Bohemian Waxwing									82			6														2	82	0	4	
Cedar Waxwing				11	10	27				3	55		30			18			12		10	45	46	38	6	14	14	55	0	13
Northern Shrike	2	1		4	3	1	1		1	1			2	2	2	1	3	2	2	1	2	3	CW	1	4	20	4	0	2	
European Starling	1133	749	926	2044	881	1189	3577	1540	1032	544	1938	1118	697	1621	635	920	1150	2923	671	1569	2304	2085	1849	2775	1796	25	3577	544	1499	
Hutton's Vireo						1	2	1				5	1	1											1	1	8	5	0	1
Yellow-rumped Warbler						1						1				1						2				4	2	0	0	
Townsend's Warbler																					1					1	1	0	0	
Palm Warbler																							CW			0	0	0	0	
Spotted Towhee	24	33	67	74	37	89	81	64	54	63	40	94	135	81	45	84	55	67	58	96	115	204	127	121	292	25	292	24	88	
American Tree Sparrow																			1				CW		5	2	5	0	0	
Chipping Sparrow							1																			1	1	0	0	
Savannah Sparrow																				1		1	1	3		4	3	0	0	
Baird's Sparrow																								1		1	1	0	0	
Fox Sparrow	12	1	12	19	10	45	31	7	21	15	8	30	33	26	12	20	13	6	11	17	33	32	8	9	42	25	45	1	19	
Song Sparrow	30	43	55	56	67	144	67	54	73	99	66	133	141	61	45	93	69	100	110	84	124	168	102	101	250	25	250	30	93	
Lincoln's Sparrow					1		1			2	4	3	1							2	1	5	3	1		11	5	0	1	
White-throated Sparrow																			1							1	1	0	0	
Golden-crowned Sparrow	1	4	3	20	16	24	5	32	9	10	19	2	28	24	5	37	45	50	26	74	91	96	35	75	81	25	96	1	32	
White-crowned Sparrow		3	5	8		9	1	1	1	1	9	2	1			4		1	18	11	4	9	2	23	10	20	23	0	5	
Harlequin Sparrow														1												1	1	0	0	
Dark-eyed Junco	234	429	623	542	554	308	517	673	296	381	565	530	415	656	304	479	931	779	694	577	560	1087	561	697	1267	25	1267	234	586	

Appendix V

CONSTITUTION - 1972

1. The name of the Society is **Nanaimo District Naturalists' Club**.
2. The object for which the Society is formed is to promote enjoyment and understanding of our natural environment by a variety of means.
3. The operation of the Society is to be carried out chiefly in Nanaimo and vicinity.

BY-LAWS

Article I - Membership

1. Membership shall be open to all persons in sympathy with the objects of the Society.
2. The Society year shall be from November 1st to October 31st.
3. Membership classes and the fee for each shall be as follows: Single - \$4.00, Family - 5.00, Student - 2.00.
4. Fees for members joining after May 1st shall be fifty per cent of the regular fee.
5. Any members whose conduct is deemed grossly detrimental to the purpose of the Society may be expelled by a three-quarters majority vote at any regular meeting of the Society.

Article II - Officers

1. The officers shall be: President, Vice-President, Secretary-Treasurer and three Directors, including one Student Director, and the Past President. These officers shall constitute the Executive of the Society.
2. Honorary Executive Members may be voted upon at the Annual General Meeting and requires sixty percent approval. A maximum of two Honorary Executive Members may be approved each year.

Article III - Meetings

1. The Annual General Meeting of the Society shall be held in November.
2. At least ten days notice shall be given for all meetings.
3. A quorum at any meeting shall be twenty-five per cent of members in good standing.
4. The Executive Committee shall meet at least once a month, except in July and August. A quorum shall consist of at least fifty per cent of the Executive.

Article IV - Election of Officers

1. Election of officers shall be the first order of business at the Annual Meeting and all members in good standing attending the meeting shall be entitled to vote. Two adults from a family membership only may vote.

Article V - Duties of Officers and Executive Committee

1. The President shall preside at all meetings of the Society and perform other duties as properly pertain to that office.
2. The Vice-President shall perform the duties of the President when the latter is absent.
3. The Secretary-Treasurer shall issue notices of meetings, conduct correspondence, keep a record of the proceedings of the Society (Minutes), compile and present the Annual Report, receive and hold in trust the funds of the Society, make all duly authorized payments and keep and render account thereof.
4. The Executive Committee shall conduct the business and management of the Society's affairs. They shall appoint from their number and from the membership such committees as are deemed necessary.
5. Vacancies in the Executive Committee may be filled by the Committee by appointment from the membership.
6. The Executive Committee shall appoint one or more auditors annually to examine and certify the Treasurer's accounts.

Article VI - General Regulations

1. These By-Laws may be altered only by passage of an Extraordinary Resolution by a three-quarters majority at a general meeting of the Society, notice of such Resolution having been stated on meeting notices at least ten days prior to the date of the meeting.
2. All disbursements shall be by cheque signed by the Treasurer and President or Vice-President, provided the amount does not exceed thirty dollars (\$30.00) at which time authorization by the Executive Committee or a General Meeting is required.
3. The Society shall be non-partisan and non-political.
4. The records of the Society shall be open to inspection by any member in good standing upon giving of reasonable notice.

[Please contact the President for the most recent, amended version of the Club's Constitution - 1994]

Appendix VI

Nanaimo Field Naturalists - Membership (July) 1997.

(by Joan Greenhorn)

A

Marga Allers
Kent Anders
Susanne Andre
P and B Armstrong

B

Kanya/Steve Baillie
Alison Bakker
Colin/Denise Bartlett
Mick Bassett
Laura Beck
Gordon Bell
Don/Audrey Blood
Neil/Jean Boume
Susan Bower
Carol/Stewart Boyce
Margie Bryant
Judy Burgess

C

Jody Carson
Trudy Chatwin
Kathy Chilton
Joy Christian
Lynda Colbeck
W.R. Colclough
Marion/Henry Coles
Brian Colwell
Alison Cookson
Bruce Cousins/Charlene Lee

D

Elthea Dale
Elaine Dally
Sue Debalinhard
Coral/David Denis
Peter Driedger
Ann Dyer

E

Joan Edwards
Bill English

F

Phyllis Fafard
Jean Fleming

G

Jean Garside
Pat Gauthier
Robin Gibson
Graham/Darlene Gillespie
Kim Goldberg
Irene Goodman
Barbara Graves
Joan Greenhorn

H

Arline/Peter Haddaway
Joan Hafeez

Kate Hall

Melba Harding
Mona Hardy
Margaret Harrod
Allan/Phyllis Hawryzki
Chad Henderson
Phyllis Hood

I

Katherine/Rick Ikona

J

Katherine/Alan Jackson
Terence/Jane James
Carol Jenkins
Shirley Jennings
Gwen Johnston
Ian Jones/Rachel Cooper

K

David/Marg Kerridge (Life Members)
Marija Kronic

M

Irene/Rex Malthouse
Joyce Martin
Joe Materi
Monica Mather
Raye McAllister
John McDowell
Gordon/Rene McLean
Helen McMullen
A. McNaughton
Gordon McNeil
Hazel McNish
Ron Membery
Bill Merilees (Life Member)
John/Adam Morden
Karen Mullen
Norris/Joyce Murray
Vi Muskett

N

Nanaimo First Nations
Scott Northrop/Joanne Lessard

O

Dorrit Oleson

P

Daphne Paterson
Jane Parkinson

R

Dr. W.E.(Bill) Ricker (Life Member)
Geoff L. Robins
Neil/Marilynne Robins
Pamela Roper
Eleanor/John Routley
Harriet Rueggeberg

Appendix VI

Nanaimo Field Naturalists - Membership

S

Rina Samson
Alison/Sandy Shaw
Peter/Barbara Scott
J.S. Sickavish
Jill Sims
Mary Sinclair
Dr. Eileen Sowerby
Esther Stemp
Robert/Jane Stevens
Frank Stoney.

T

Margaret Taylor
Anne Thompson
H.L. & J.B. Thompson

V

Meike Smits Van Ham
Anneke/Peter Van Kerkoerle
Jeffery/Joy Van Den Driessche
Sid/Jean Vivian

W

Elaine Waddell
Sandra/Rob Wager
Steve/Violet Wawrykow
Ida/Fred Welland
Jack Wilkinson
Kit/Molly Willmot

.....

The earliest membership list found in the Club records was dated April 1975.

There were 69 members:

Barraclough, Mary and Ed
Boulding, Pat
Bourne, Jean and Neil
Byrne, Mollie
Bystrom, Mary
Campbell, Ken
Denis, Coral and Dave
Doskotch, Elaine
Espitalier, Winnie
Flett, Agnus and Alf
Gailius, Dorothy
Graves, Barb and Bob
Grew, Irma
Hawryzki, Allan
Helem, Winnie and George
Hutton, Ruth and Edward
Jerome, Mary and Ernie
Johnston, Gwen and Angus
Kerridge, Marg and Dave
Ketcham, Dawn
Knowles, Gloria and Ken
Lamder, Kitty and Ivor
Layer, Ethel
Mason, Elda
Meynell, Una and Alan
Morrison, Francis and John
Murdoch, Phyllis
Neaves, Phil
Nicks, Jean and Bob
Ovenden, Joyce and Joe
Pass, Mary
Petershofer, Joseph
Richards, Dave
Ricker, Bill
Roy, Joan and Ray
Russell, John
Samson, Rina
Saxer, John
Scofield, Dorothy and Fred
Thompson, Janet
Timmins, Helen
Uden, Brenda and Bob
Van Kerkoerle, Anneke and Peter
Vivian, Jean and Sid
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Waddell, Elaine
Williams, Jean
Young, Ina

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