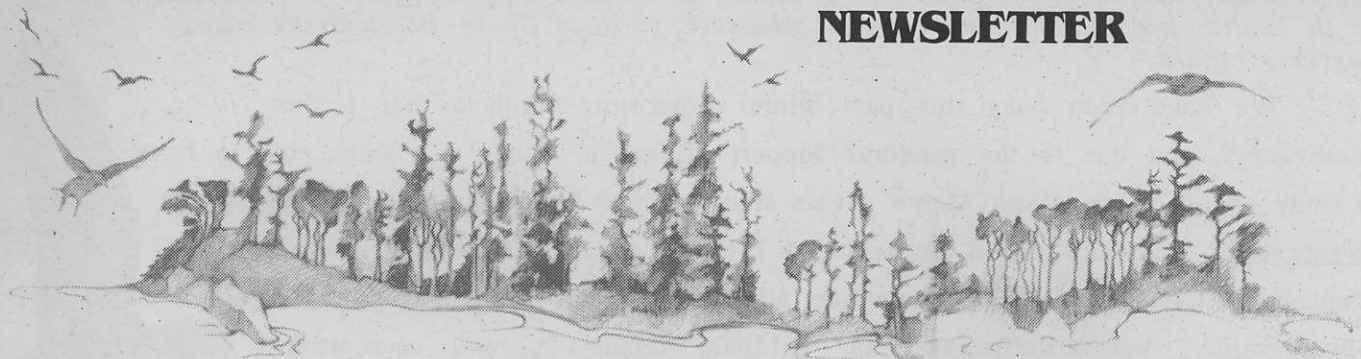


MARCH 1991

FRIENDS OF ECOLOGICAL RESERVES NEWSLETTER



A Message from the Editor

" The diversity of life forms , so numerous that we have yet to identify most of them, is the greatest wonder of this planet."

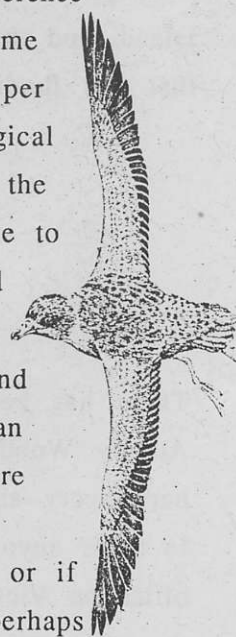
E.O. Wilson, 1980

A busy winter; full of storms, snow, and controversy. Last week one of spring's first satin flowers appeared on a rocky outcrop above Thetis Lake near Victoria reinforcing the fact that it is time to publish another Friends of Ecological Reserves newsletter before spring really arrives.

Your directors have been especially busy as our office manager, Peter Grant left for a four month holiday to the Far East at the beginning of January. In the meantime, we are trying to keep up with correspondence, projects, and submissions to various government committees, the Old-growth Strategy, Parks 90, and the Forest Resources Commission. So if your letter has been a little slow to be answered, you will know why.

Some of us were fortunate to attend the recent ' Our Living Legacy' conference on biological diversity held at the Royal B.C. Museum. The speakers addressed some very pressing threats to the world's biodiversity; the extinction of 1200 species per year, the burgeoning human population, climate change, and the rate of ecological destruction. However, Dr.'s Jim Pojar, Jim Walker, and Bristol Foster focused on the diversity of ecosystems in British Columbia and the opportunity that we still have to preserve our living legacy of biodiversity. Other speakers focused on legal and government strategies required to maintain biodiversity in the province.

Throughout the conference, the idea of Ecological Reserves cropped up again and again. There is no doubt that our present and future Ecological Reserves have an increasingly important role in the maintenance of biological diversity. They are natural banks of genetic material reserved for study and future use. Ecological Reserves are necessary because we just don't know how ecosystems really work, or if a certain plant might just provide a cure for some dreadful disease. However perhaps these natural areas are most important as affirmation that we care about our natural world enough to let some place's function without man's intervention. In the words of the ecologist Stan Rowe:



" The world was not created for people only, but for purposes that far transcend the human race with its limited foresight and imagination; and therefore it behooves all conscious inhabitants of this superb planet to nurture it as a garden, maintaining it in health, beauty, and diversity for whatever glorious future its denizens may together share."

We have been busy this past winter supporting projects that further biodiversity, and due to the generous support of several donors we were able to have a study completed by Keith Moore. This study entitled Profiles of the Undeveloped Watersheds examines the 8 undeveloped large (over 5000 hectares) watersheds on Vancouver Island and brings together all the available information regarding physiography, vegetation/ecosystems, wildlife, fishery, forest, recreation, mineralization, and cultural values. Since these 8 watersheds are the only undeveloped primary watersheds left out of 90 primary watersheds on Vancouver Island this study is very important in identifying the gaps in knowledge regarding these important areas. Keith writes,

"I was surprised, even shocked, how little systematic, good inventory information exists for most of the undeveloped watersheds on Vancouver Island." Most government staff agree that present inventory information is inadequate to be making major land use decisions in the undeveloped watersheds. They recognize the value of better information and would strongly support field inventory programs to gather a variety of necessary information."

We hope that this report will lead to cooperative research efforts in the undeveloped watersheds and the protection of some of the biological diversity in these critical areas. Please read Keith Moore's article and the research update.

The funding for the biodiversity projects comes mainly from Eden Conservation Trust in Toronto, Assured Recycling Inc. in Victoria, Nancy Braithwaite of Salt Spring Island, and the Valley Outdoor Association of White Rock. We are very appreciative that this funding gives us the opportunity to do these kinds of badly needed studies.



There has been some administrative changes in FER since the last newsletter. Audrey Woodward has taken over the duties of Membership Secretary. We welcome her cheery and efficient approach to this duty. Bob Fahrig has resigned as Treasurer. Is there anyone interested in taking over this position? We have also vacated our office on View St. in order to save money. The directors felt that we just did not use the office or telephone enough to warrant the \$300.00 per month expense. Please take note of the director's phone numbers if you require information.



We are enclosing a copy of our publication "Ecological Reserves: Natural Areas for Tomorrow." If you have already read this publication please pass it on to someone who would appreciate it. Also enclosed is a copy of a new magazine "Coastal Echos". This magazine does not necessarily reflect our views, but the editor asked that we provide a free issue to our members.

I hope you enjoy this newsletter, join us on our field trips, and come out to the annual general meeting on May 5th.

- Trudy Chatwin

UPCOMING EVENTS

FIELD TRIPS

Race Rocks: Sunday, April 7th

Our annual field trip to this marvelous Ecological Reserve. Meet at 9:30 am in the Visitor Parking lot at Lester B. Pearson College. After meeting we will have a marine ecology lab session led by students and warden Gary Fletcher in the Marine Science Lab. Following this session we will be transported by boat to the Race Rocks Lightstation. Learn some of the history of this lighthouse and catch breathtaking views of the Strait of Juan de Fuca, Northern and California Sea-lions, seabirds and underwater marine life. Gary Fletcher will also explain some of the development plans for the Rocky Point Military Reserve that threaten endangered flora in this beautiful example of Garry Oak-Douglas Fir Parkland.

Cost of this field trip will be \$5.00 for members and \$10.00 for non-members. Proceeds will go towards purchase of the underwater camera for photo documentation of the Ecological Reserve. Please contact Trudy Chatwin at 592-3559. Bring a lunch and warm clothes, rubber boots, rain gear, binoculars, and camera.

Friday March 29 - Monday April 1. Easter Whale Watching at Kyuquot with West Coast Expeditions

Join West Coast Expeditions on a spring adventure to Kyuquot Sound. The primary focus of this trip will be to watch for the northward migration of the Pacific Grey Whale, but there will be a chance to see Kyuquot Sound and the Brooks Peninsula (featured in Sierra Club video). There will be a chance to see sea otters, beautiful marine life, forests, and native sites as well.

West Coast Expeditions provides all food, accomodation (at a lodge in Kyuquot village) and transport from Fair Harbour onwards. Cost will be \$270.00. Contact Mary Rannie at 383-8207 or Rupert Wong at 926-1110, or 322-9200 for details.



Saturday May 4. Mt. Tzuhalem Ecological Reserve -Spring wildflowers

Wildflowers, Garry oaks, and spring birds. Join the Friends and the Cowichan Valley Naturalists on our annual jaunt to the Mt. Tzuhalem Ecological Reserve. Check progress on the fence that Friends' efforts have helped to build. This is a short hike looking at wildflowers, and taking in the views during lunch.

Meet at the old Somenos Nature Centre on the highway at 10:00 am. Call Henry Bauld at 721-5962, or Diana Angus at 746-6659 for details.

Sunday May 5, Trial Island Ecological Reserve off Oak Bay

Visit B.C.'s newest Ecological Reserve with the most "outstanding diversity of rare and endangered plants in B.C." Golden paintbrush, rosy owllover, California buttercup, and many beautiful spring flowers should be in bloom. This field trip is being led by Dr. Adolf Ceska, and Dr. Hans Roemer so should be very special. We will be taken by zodiac boat over to Trial Island leaving from Shoal Bay (McNeil Bay) beach. Mike Shepard of Swiftsure Tours, and Trudy will be using their boats. Meet at 9:30 at Shoal Bay where the boat shuttles will be run. Return time will be approximately 1400 hours.

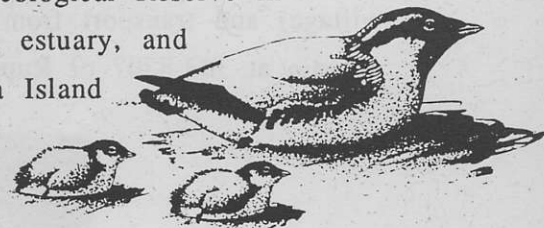
Bring a lunch, rubber boots, rain gear, warm clothes, and a sense of adventure. You can register by phoning Henry Bauld (721-5962) as there has been a large attendance on this field trip in the past. The cost will be \$5.00 for members, and \$10.00 for non-members to cover boat expenses. The annual general meeting follows this trip.

**Wednesday, May 29 to Saturday, June 8 The Queen Charlotte Islands:
Whales, sea-birds, and forests featuring the V.J. Krajina Ecological Reserve .**

Sail on the beautiful Darwin Sound II to one of the most spectacular and remote places on the British Columbia Coast. Join the Whitney's and naturalist Trudy Chatwin for a trip along the north and west coasts of Graham Island. This is the area proposed as a Haida tribal park, Du'gusaad, and is truly a voyage of discovery.

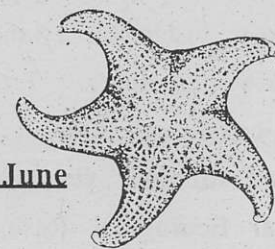
Witness hundreds of ancient murrelet chicks leaving their burrow nests and making a dash for the cold waters of the Pacific. Visit the ancient Haida villages of Kiusta, Tian, Dadun'slung, and Kung. Walk magnificent sandy beaches and explore the amazing diversity of the rocky shores.

At least two days will be spent exploring the Vladimir Krajina Ecological Reserve in Port Chanal and Hippa Island. The towering Sitka spruce forests, estuary, and spawning sockeye salmon are spectacular. The wildness of Hippa Island and its seabirds make this area a photographer's paradise.



Summer Field Camp on Spring Island near Kyuquot

Dates: Sunday July 7 to Friday, July 12 and Sunday, also June 16 to June 21.



Checleset Bay and the area near Kyuquot Sound off the northwest coast of Vancouver Island is a naturalist's paradise. With the backdrop of the Brooks Peninsula, this maze of rocky reefs, islets, bays, beaches, estuaries, and forests supports an amazing array of lifeforms. From our base camp we will visit and see ancient fossil deposits, beautiful sand beaches, lush rainforests, sea otters frolicking in the kelp, northern sea-lions on their haul-out, sea-birds on their nest-sites, exceptionally rich intertidal life, and silvered carved poles on abandoned village sites of the West Coast (Nuu'chal'nuth) people. Jerry Lange and Rupert Wong, our hosts at Spring Island will pick up the group at Fair Harbour and transport us by boat to this wilderness area. We will visit Checleset Bay and the Tahsish Estuary Ecological Reserves (if possible, otherwise we may visit the old-growth forest at the Nasparti). Our visit to the lower Tahsish or Nasparti River and the big spruce forests will emphasize the need to have these areas protected. The logging that has gone on in the Kyuquot area and near the old Ecological Reserve proposal at Rugged Point will certainly be a reminder that we need to work hard now to set aside old-growth forests while the opportunity exists. We will have field sessions on marine ecology, forest ecology, and native uses of plants. As well there will be time for walking on the beach, reflection in the forest, discussion over the campfire, fishing, kayaking, and taking in the scenery.

Bring your camera, binoculars, warm clothes, and a sense of adventure. Jerry Lange provides the rest. The tour price includes camp accomodation, good food, boat transport, use of kayaks etc. If you wish transport back and forth from Campbell River to Fair Harbour this can also be arranged.

Please contact West Coast Expeditions, 1348 Ottawa Ave. West Vancouver, B.C. V7T 2H5, phone 926-1110. Trudy can also provide details -592-3559

August 29 - September 3 Chilcotin Plateau and Chilco Lake.

Tentative camping trip to this spectacular area and some of the Ecological reserves is planned for the long holiday weekend. Phone Henry Bauld for details.

The endangered Somas Estuary near Port Alberni

Botanists Dorothy and Bill Van Dieran have agreed to lead a trip to the Delta on a Saturday in June or July depending on tides. Please contact Trudy or Henry re dates.

We will also visit such places as Langara Island (famous for its spring salmon fishing), Frederick Island, Lepas Bay, Marble Island, and watch feeding grey whales in Skidegate Inlet. Trudy has worked on sea-bird research and inventory in this north-coast area and is familiar with many of its special features and areas. She has worked for four years on the Darwin Sound, during which time the idea for this special Ecological Reserve trip was conceived.

Accommodation is within comfortable cabins aboard the Darwin Sound. Meals are gourmet. The 11 day trip includes a two day land tour of Graham Island, picnics in Tlell, visits to carvers workshops, museums, and a special seafood feast in Massett before boarding the boat for the cruising part of the tour. The cost will be around \$2000. The dates May 29- June 8 coincide with the greatest seabird activity. Please contact either Trudy at 592-3559 or Pacific Synergies at 932-3107 for further details. Almost full.

NIMPKISH ISLAND ECOLOGICAL RESERVE AND THE WHITE RIVER FOREST.

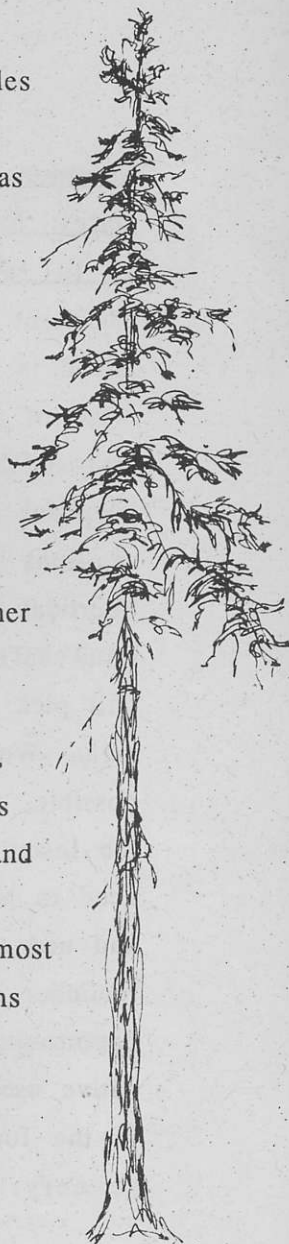
Rolf and Heather Kellerhals, the wardens for Nimpkish Island Ecological Reserves have agreed to guide us to this reserve some weekend in June 1991. Nimpkish Island is home of the world's tallest Douglas firs and is a beautiful old-growth forest. Logging has disturbed the river pattern, threatening the trees. Rolf is B.C.'s foremost hydrologist and has worked with various agencies recommending various solutions to the Nimpkish problem. For further details of this trips please contact Rolf at or Henry Bauld at 721-5962

Note: Richard Martin, botanist is interested in spending three days on East Redonda Island in July or August making a floral inventory. Anyone interested in accompanying him should contact Richard at 335-2419

LIMITATIONS TO LIABILITY ON FRIENDS OF ECOLOGICAL RESERVES FIELD TRIPS

PLEASE NOTE THAT PARTICIPATION IN ANY FRIENDS OF ECOLOGICAL RESERVE FIELD TRIP IMPLIES YOU JOIN IN DECISIONS OF WHERE TO GO, HOW EVENTS TAKE PLACE ETC.

PARTICIPANTS MUST REALIZE THAT SOME TRIPS ARE IN WILDERNESS AREAS WITH INHERENT DANGERS, AND THEREFORE THEY MUST CONDUCT THEMSELVES ACCORDINGLY. FRIENDS OF ECOLOGICAL RESERVES OR ANY MEMBER OR LEADER CANNOT BE HELD LIABLE FOR INJURY, ACCIDENT, OR DIFFICULTY ENCOUNTERED ON A FIELD TRIP.



ANNUAL GENERAL MEETING

SUNDAY MAY 5th 5:00 p.m. Potluck dinner at Henry Bauld's House
2238 Arbutus Road, Victoria, B.C.

After the field trip to Trial Island please join us for the Annual General Meeting of the Friends of Ecological Reserves. We will discuss past and upcoming projects, conservation directions for our group, have the election of officers, budget, and a wonderful dinner!

If you need to billet please contact Henry Bauld or Trudy and we will do our best to help.

PARK PLAN 90 AND MINISTRY OF FORESTS WILDERNESS AREAS PLAN

Many of the public were heartened by the prospect of examining what B.C. Parks had in mind to complete the Park system in the Province. It is appropriate that the Ministry of Forests has come out at the same time with their plan. These initiatives deserve congratulations as they offer the hope that in future there will be less secrecy in Park and Wilderness Area planning and that there will be a productive sharing of minds.

Having said that, I find many areas of concern, particularly with Park Plan 90. Here are a few of them.

Provincial Parks (including Recreation Areas that may allow some industrial activity) presently cover 5.3% of the province (other parks add 1.3%). In the past parks have been chosen for recreation and scenery rather than protecting biodiversity, a key public concern today. Much thought has been spent on minimizing resource conflicts and as a result most of the protected areas is bog, subalpine, or alpine. For example, while 12% of the land in the East and West Kootenays is protected by park status, 91% of the protected area is non-productive forest. If we look at Park Plan 90 we can see that one percent is recommended as additions to the Kootenays and 96 % of this is non productive forest and 4% is low productivity.

On the other hand if we look at the Ministry of Forest's plan for the Kootenays we are pleasantly surprised to see this Ministry is recommending a 5% addition, five times more than B.C. Parks, made up of 74% non productive forest, 4% low forest harvesting capability, 14% moderate capability and 8% high capability!!

The tradition of B.C. Parks protecting the high country for recreationalists (and to avoid confrontation with logging companies) continues. There is certainly nothing wrong with protecting the alpine unless it is at the expense of low lying, far more biologically diverse areas. This appears to be the case. Most of the controversial areas with the highest biodiversity have been omitted from the plans of both agencies: the Khutzeymateen, Carmanah-Walbran, Tahsish-Kwois, Koeys, Kitlope, lower Tsitika, Megin, and Brooks Peninsula additions including the East Creek, Battle and Power areas. As well as containing productive timber, these areas contain a wealth of biodiversity and cultural significance.

In a recent conference on Biodiversity in Victoria it was pointed out that the extinction of species, subspecies, populations and ecosystems is not only irreversible; it is probably occurring now in the world at a faster rate than any time for many millions of years. Our province is by far the most biologically diverse in Canada. We have to insist that protecting biodiversity be one of the key reasons for having Parks.

B.C. Parks, in their booklet "Striking the Balance", state that their intention is to raise park area from the present 5.3% to at least 6% IN THE NEXT 20 YEARS. The world community through the Brundtland Commission recommended that the protected area in each country be raised to at least 12% in the next 10 years. This plan has been endorsed by hundreds of thousands of Canadians. It seems that once again the we have to put pressure on the government.

The Parks 90 plan assures us that only our most important natural features will be protected, and then only if the features are not already protected in existing regional and national parks. This policy has the effect of placing all our biodiversity eggs in one basket. The subjectivity of deciding what is "important" may not be appreciated by later generations confronted with the results of species and ecosystem extinction. We have to pressure the government to protect at least three examples of all ecotypes to mitigate against natural disasters.



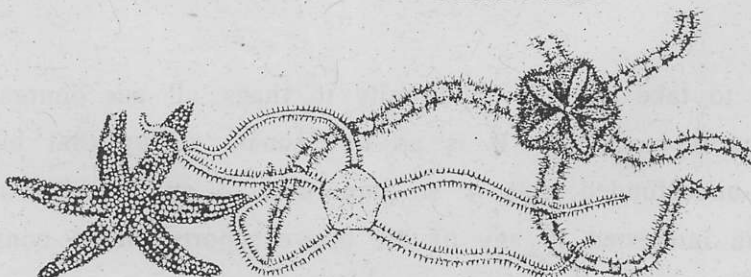
Invariably it takes years from recommending an area for protection to success in establishing a protected area. In the meantime there must be moratoria on resource development until the proposal is either completed or abandoned. Our tradition in B.C. of 'chop while they talk' is absurd.

One of the reasons for the two agencies airing their plans is that doing so follows one of the recommendations of the Wilderness Advisory Committee. In their publication, the Wilderness Mosaic, the Committee stated that ideally wilderness is over 5000 ha. However we learn in Parks Plan 90 that Parks considers an area large if it is over 1000 ha and the Forests Ministry uses the figure of 1000 ha to define wilderness. It appears that particularly Parks up until now have been trying to do the minimum to satisfy the groundswell of public opinion that is demanding more parks in biologically diverse as well as alpine sites. One wonders whether, in a few more years, whether the definition of large, or wilderness will be lowered to 500 ha, or even lower. The public must work here as well to reverse this trend.

It is disheartening that the Ecological Reserves program gets only passing mention in B.C. Park's literature even though this program belongs to the same ministry and is directly involved with activities similar to Parks, namely protecting samples of our biodiversity. I was working with Hans Roemer on a 'systems plan' for ecoreserves 7 years ago and the fact that it is not made public at the same time Park 90 plan can be attributed to the tiny staff in Victoria (down to two now) and the lack of support generally for the program. Once again, here is a point on which we must exert pressure.

In conclusion, both agencies plans are a beginning but we must make sure that the wishes of our descendants, from whom we are borrowing the land, are taken far more fully into consideration. While it is difficult to imagine what people might be thinking in 100 years, I suspect that they might think that preservationists make good ancestors.

- Bristol Foster



Reports from Forest Biophysical, Sea Otter, Marbled Murrelet, and Whale Researchers

"The most beautiful experience we can have in life is the most mysterious. It is the fundamental emotional which stands at the cradle of true art and true science. I am satisfied with the mystery of the eternity of life."

- Albert Einstein

In the last two years Friends of Ecological Reserves has supported research in Ecological Reserves and has supported research that may lead to protection of important natural areas. It is our belief that research and knowledge is critical to making informed land use decisions and can serve as valuable rationales for setting aside Ecological Reserves. We now have reports from Moore Resources Ltd. concerning what is known about the biological, physical, and land tenures of the 8 major unlogged watersheds on Vancouver Island. This report is a major contribution to collection of data that will aid in conservation of biodiversity in B.C.

Dr. Alan Burger, Irene Manley, and Robyn Shortt have submitted a very interesting report on their Marbled Murrelet study in the Carmanah Valley. This report documents the use of the entire Carmanah Valley by Marbled Murrelets and the finding of the nest in the upper Walbran Valley.

Robin Baird and Pam Stacey have submitted publications on their transient killer whale research around the Oak Bay and Race Rocks Ecological Reserve, as well as other marine mammal research on Elephant Seals, stranded marine mammals and Grey Whale mortality.

Jane Watson writes to tell us that her sea otter foraging research is going very well and she is writing up her thesis now. She reports that the Vancouver Island sea otter population is doing well and there are approximately 600 sea otters on the northwest coast of Vancouver Island now with 300 - 350 animals in the Checleset Bay Ecological Reserve. She will be sending us a summary of her work.

We will be involved with Jim Darling's biodiversity study in the Megin River of Clayoquot Sound. This study is in the planning stages now and we plan to apply for "old growth" funding from the B.C. Forest Ministry. Dr. Chris Pielou has kindly agreed to help us with the study design and sampling aspects of this project.

I would like to take another opportunity to thank all our donors for these opportunities to support research. It is an unfortunate reality that biological field research is always underfunded, but is so important in an overall conservation strategy. If you are interested in any of the above reports please contact Trudy Chatwin at 592-3559 and I will provide a copy or further information.

AT LAST: AN ETHICAL INSURANCE COMPANY

Assured Recycling is a non-profit insurance and investment service established by **Christopher Pegg** and **Eric Hartley**, long-time members of the insurance industry, to provide their clientele with more control over the placement of investment and insurance dollars. Both Chris and Eric are dedicated to ethical investments while remaining competitive and **Assured Recycling** works with the VanCity Ethical Growth Fund to make it happen.

Assured Recycling offers a wide range of services:

- * "Green" RRSPs and other pension plans
- * Home, tenant and auto insurance
- * Life, disability, group and business insurance policies

The company provides two ways to exercise your consumer influence: 1) By directing investments to companies that are sensitive to the environment: 2) By "recycling" commissions to the environmental organization of your choice. You can help fund the Friends of Ecological Reserves while making wise investments. Here's how it works: If your insurance premium generates a \$100 commission, **Assured Recycling** will "recycle" half (\$50) to your chosen organization. **Assured Recycling** is presently helping such groups as the Canadian Parks and Wilderness Society, the Canadian Physicians for the Prevention of Nuclear War, the Western Canada Wilderness Committee, and the Sierra Club of Western Canada to name just a few.

Assured Recycling is dedicated to taking financial responsibility in a whole new direction. For more information contact:

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(604) 388-5014



OLD GROWTH FOREST STRATEGY REPORT

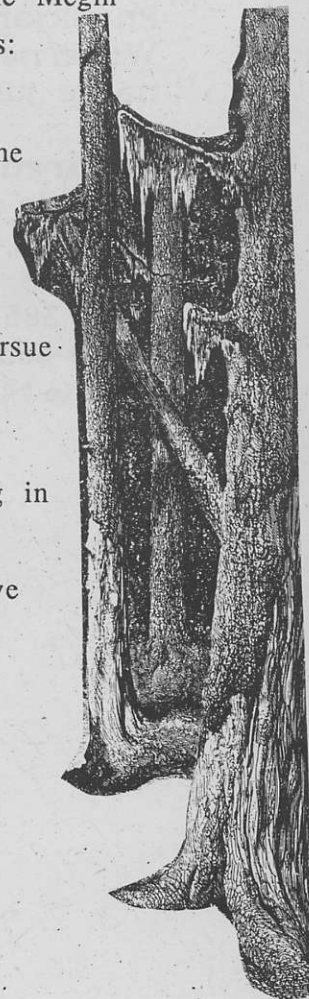
In November 1989 the Ministry of Forests sponsored an "Old Growth Strategy Workshop" to formulate definitions, directions for policy, and examine the problem of diminishing old-growth forests in B.C. From this workshop, establishment of a formal project began in April 1990. Vicky Husband and Bristol Foster have been our representatives on various teams, but Friends of Ecological Reserves have also been actively involved in the submission of candidate old growth forest areas for deferral. The stated purpose of The Old Growth Strategy is to "provide a framework for managing old growth forest ecosystems in British Columbia."

Last summer the Friends of Ecological Reserves submitted reports to "The Old Growth Strategy Project" requesting that certain areas of old-growth forest be deferred from logging for two years. One of the areas we recommended, "East of Kokanee Creek" was deferred but most of the other areas were not. Last November there was another chance to resubmit forest areas and Peggy Frank, Trudy Chatwin, Henry Bauld, and Bristol Foster worked hard to send in reports for review. These referrals included the Lower Tahsish River, the Klaskish, Power, and Nasparti creeks in the Kyuquot Sound area, the lower Tsitika watershed, Flores Island and the Megin River in Clayoquot Sound. The Review teams recommendations are as follows:

LOWER TAHSISH/KWOIS DRAINAGES: The Review team recommends deferral for the Tahsish Kwois Proposal

KLASKISH- EAST CREEK AREA: The Review Team recommends the Interministry Management Committee instruct the Ministry of Parks, Ecological Reserves to pursue expansion of the ecological reserve in this area.

LOWER TSITIKA: The review Team recommends deferring the proposed harvesting in the Tsitika. They also recommend that a study be commissioned to determine the value of this area for tourism and the impacts the proposed harvesting might have on these values. The Review Team recommends MOF Vancouver Region be acknowledged for their excellent initiative to monitor the hydrological changes. Lastly the Review Team recommends that the boundary of the ecological reserve protecting the estuary and rubbing beaches be examined.



FLORES ISLAND: The Review Team recommends a map notation be placed over the area.

MEGIN RIVER: The Review Team recommends a map notation be placed over the area. (Map notation indicate values of the area, if an application comes up to develop these areas.)

NASPARTI WATERSHED: The Review team recommends the original map notation be retained.

POWER RIVER: The Review team recommends the original map notation be retained.

It is our understanding that the Review Team's recommendations will be passed on to the Cabinet for discussion and hopefully approval.

In December 1990 the Ministry of Forests published a progress report entitled : Towards an Old Growth Strategy. Along with a series of outlined objectives and 'areas of emerging consensus' the report outlines a working definition of an Old Growth Forest: (after J. Franklin, 1989)

"Old growth can be described as a forest that contains live and dead trees of various sizes, species composition, and age class structure that are part of a slowly changing but dynamic ecosystem. Old growth forests include "climax" forest , but do not exclude subclimax or even mid-seral forests. The age and structure of old growth varies significantly by forest type and from one biogeoclimatic zone to another. For example, a coastal old growth forest could be 200 years old or 1000 years old; whereas interior old growth could be 100 years old.

The age at which old growth develops and the specific structural attributes that characterize old growth will vary widely according to forest type, climate, site conditions, and disturbance regime. However old growth is typically distinguished from younger growth by several of the following attributes:

- large trees for species and site*
- wide variation in tree sizes and spacing*
- accumulation of large size dead-standing and fallen trees*
- multiple canopy layers*
- canopy gaps and understory patchiness*
- decadence in the form of broken or deformed tops or boles, downed logs and root decay".*

One of the most significant "areas of emerging consensus" within the report was identified under Diversity : "Our current old growth reserves do not adequately represent the diversity of old growth ecosystems in B.C. and their values." Let us hope that the Old Growth Strategy leads to the creation, research in, and effective management of forested Ecological Reserves.

If you are interested in reading the above-mentioned reports please contact either Trudy Chatwin or the Ministry of Forests.

The Endangered Somas Delta near Port Alberni

Anne and Cam Holt, wardens for the Sutton Pass Adder's Tongue Fern Ecological Reserve recently alerted us to a threatened area near the Port Alberni pulp mill. The Somas Delta is an exceptional tide flat area studied botanically by Bill and Dorothy van Dieren, then proposed as Ecological Reserve No. 367 in 1983. Somas Delta supports over 205 species of plants alone, including 20 species of rare plants, and one species, Button's bush dodder Cuscuta cephalanthi which is only found in the delta. Trumpeter swans and other water birds favour the delta as a wintering area.

Although local support for the protection of the Somas Delta is growing, the Delta is private land held by MacMillan Bloedel and they would like to use the delta for expanding effluent treatment lagoons from their pulp mill. It is a shock that such a unique area may become a settling pond for sludge! Friend's support is needed for the creation of the Somas Delta Ecological Reserve.

At this time we are working on planning a field trip to see the Delta. If you are interested in the Somas Delta and it's preservation please contact the Holts at 723-3006. The Holts have provided us with a report on the flora of Somas Delta which is available through Trudy Chatwin 592-3559. Letters to Land Use Planning Advisory Team, MacMillan Bloedel Ltd. , 60 Front St., Nanaimo, B.C. stressing that the area should be protected will also help.



KEITH MOORE'S REPORT ON THE UNDEVELOPED WATERSHEDS ON VANCOUVER ISLAND

For several months, forestry consultant Keith Moore has been working on an inventory of the watersheds of the temperate rainforests of coastal BC. He has developed a classification system for identifying whether watersheds are developed or undeveloped and has classified all the coastal watersheds larger than 5000 ha that flow into saltwater. These are called primary watersheds. This inventory will soon be published by Earthlife Canada as part of the Endangered Spaces program.

On Vancouver Island, Keith has identified 8 primary watersheds larger than 5000 ha that are undeveloped. This group has been further subdivided into watersheds that are pristine - meaning there has been no past or present logging, mining or road construction - and those that have been slightly modified by past or present development - meaning that less than 2% of the total watershed area has been affected. Using this classification system, the Moyeha, Megin, Sydney, Nasparti and East Ck watersheds, all on the west coast of the Island are "pristine", and the Power and Klaskish on the west coast and the Shushartie on the northeast coast are "modified".

In January of 1991, the Friends of Ecological Reserves issued a contract to Keith Moore to gather available inventory information about these 8 watersheds. In addition we asked him to compile information about the Tahsish. This work involves assembling biophysical inventory information on wildlife and birds, fisheries, vegetation and ecosystems, and estuaries in each watershed; collecting land status information; identifying present and proposed protected areas; He will also provide us with information about the past, present and proposed logging, road construction and other industrial activities in each watershed.

Keith has been collecting this information from a variety of government and private sources and from various reports. We expect a completed report from him by the end of February, 1991. He reports that there is considerable interest in the issue of unlogged watersheds and strong support for this type of program to assemble the information to provide good profiles of each watershed. However, information on the environmental values in the presently unlogged watersheds is very incomplete and in some cases, completely lacking. There is a great need for much better information before any decisions about future land use in these watersheds are made.

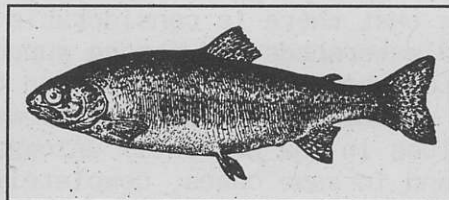
SQUAMISH EAGLES AND BAYNES ISLAND ECOLOGICAL RESERVE

A "small but active" group of Friends assembled on January 26th for a field trip to the Squamish area to look for bald eagles. It was a glorious day and we had spectacular views of the Coast Range. We were even spared the cold north wind which funnels down Howe Sound at this time of year. Al Grass, warden for the Baynes Island Ecological Reserve led the trip, and provided information on the reserve:

Baynes Island lies at the confluence of the Squamish and Cheakamus Rivers. It is inaccessible except by boat (which we did not have at this time of year)! The eagle congregation which is the largest in B.C., is usually around 1,300 birds and coincides with the chum salmon run in December/ January. The chum salmon run was early this year and the birds started moving away from the river in early January. We counted only 32 birds, nearly all adults. We then made stops on the estuary and on the levee along the Squamish river as well as in Brackendale. We saw fewer species of other birds than expected, perhaps after the severe Christmas weather? Even the usual noisy chatter of the belted kingfisher was missed. There was 16 species of other birds spotted and a harbour seal was sighted way up the river.

We were fortunate to have Fred Nuszdorfer, a professional forester accompany the trip and point out disease and environmental problems associated with spruce and hemlock in this area.

Many thanks to Al Grass for leading this enjoyable trip!



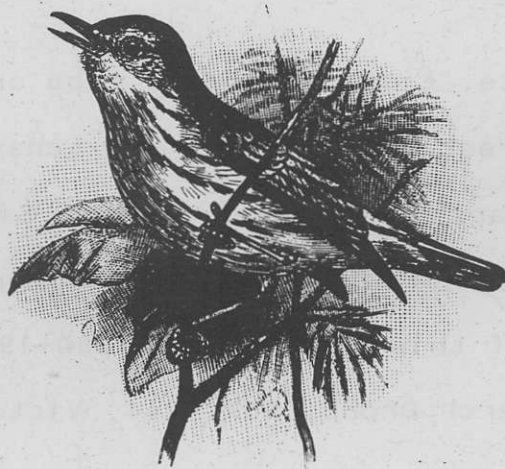
Field Trip Reports by Henry Bauld

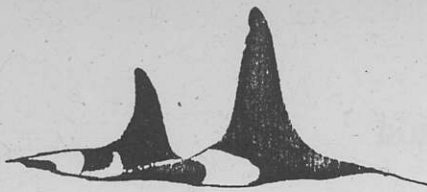
Galiano Island

On November 24th the Friends met on Galiano Island. We intended to visit the newly established Galiano Peat Bog Ecological Reserve (set aside due to bog rareness in the Coastal Douglas Fir Biogeoclimatic Zone). Unfortunately, the bog is currently under water as a result of beaver damming activity. This commando unit, thought to be responsible for much fall down in the province, is believed to be working for M.B.!

Dawn Christian, one of the local wardens, led us on a wonderful hike along Bodega Ridge, past spectacular eight foot high manzanita bushes and told us about the imminent Nature Conservancy/ community land purchase on the island. M.B. still have current logging plans for the Bodega Ridge area. We also hiked along cliffs overlooking Trincomali Channel near Dawn's house.

Finally it was dark and we went for a fine dinner at the Pink Geranium Restaurant. This will be the last dinner the Friends will have at Ken and Sylvia Mounsey's as they are converting the Pink Geranium into a bed and breakfast establishment.





If you see any whales, porpoises,
dolphins, elephant seals or fur
seals (dead or alive)
anywhere in B.C.,

around Greater Victoria call 380-1925
or the vessel "Sundiver", VHF channel 68



Please report the date, time, location, type or description of the animals, number, direction of travel and behaviour. These records are valuable for research undertaken through Simon Fraser University and The Whale Museum, Friday Harbor. For more information, or for extra copies of this notice, call 380-1925 or write to the Marine Mammal Research Group, Box 6244, Victoria, B.C. V8P 5L5.





DIRECTORY

Friends of Ecological Reserves.

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President: Bristol Foster: 537-9774 , 381-7740

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Treasurer: Vacant

Directors: Vicky Husband, Peggy Frank, and Steve Ruttan

Membership: Audrey Woodward: 383-7841, Josette Wier

Office Manager: Peter Grant (after May 1st): 595-4813

Field Trip Coordinator: Henry Bauld : 721-5962

Friends of Ecological Reserves Membership Renewal

As the membership year of Friends of Ecological Reserves follows the calendar year, 1991 membership fees are now due. (If you have renewed, our thanks, and ignore this reminder.)

We do hope you will renew. We have a number of exciting and vital projects in mind for this year. Your membership fees will show support for our aims and projects:

- a biodiversity study in the Megin River on Vancouver Island and further field work on the watersheds of Vancouver Island
- work towards setting aside valuable segments of B.C.'s natural heritage such old-growth forests, marine areas, grasslands, and the representative and unique ecosystems that make up the diverse fabric of our beautiful province.
- help protect existing Ecological Reserves through a matching grant fencing program
- help fund research in Ecological Reserves and potential areas of natural significance
- renew our committment to preserving the Khutzeymateen
- help with our educational efforts in schools, production of the newsletter, and field trips
- shows support for our input to the various government task forces, Parks 90, and Old Growth Strategy etc.

Please make out a cheque payable to the Friends of Ecological Reserves.

A return envelope is enclosed for your convenience.

Name(s):

Please name all family members:

Address:

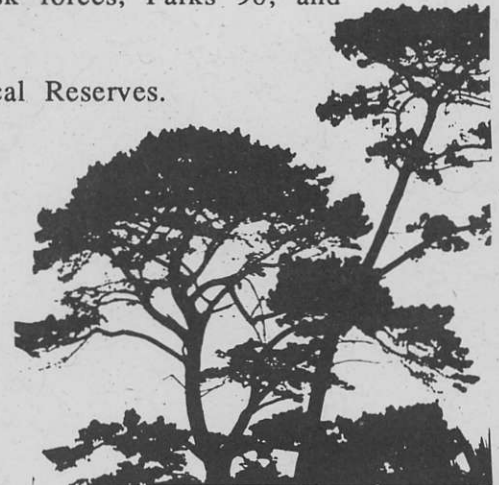
Telephone number:

Interests:

Would you be interested in volunteering? If so, what are the things you would like to do?

Would you like an individual membership at \$15.00_____

or a family membership at \$20.00_____



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