## Friends of Ecological Reserves Newsletter

SPRING 1988

PRESIDENT'S REPORT $\square$ Excellent

In mid-March I travelled to Ottawa and Toronto for the Friends. Western Canada wilderness Committee paid for wayne McCrory, our Khutzeymateen wildife research consultant and Herb Hammond, our Khutzeymateen forestry consultant to travel to ottawa as well. As a team we were able to present the case for preservation of the Khutzeymateen from the wildife and forestry point of view.

There is a great deal of concern in Ottawa regarding the lack of sustainable use of our forests in B.C. and also appreciation of the role that old growth forests play as significant and irreplaceable habitat for some wildlife species.


#### Abstract

We met with the organizations that had sponsored research work in the Khutzeymateen, Wildife Habitat Canada and the Canadian wildiffe Federation in Ottawa and world Wildife Fund, Canada Life, Eden Conservation Trust and the Mclean Foundation in Toronto. We brought them up to date on the wildife and forestry research work completed in the Khutzeymateen. A summary report of preliminary findings on "The Economic and Ecological Feasibility of Forest Managemont in the Khutzeymateen Watershed" prepared by Silva Ecosystem Consultants Ltd. was distributed. Wayne McCrory's completed wildilfe report is now on its way to our sponsoring groups. All the organizations are very supportive of the research and educational work we have been doing. We hope for continued financial support for this year's final forestry research trip in May and for our continuing work in education. World wildife Fund have committed $\$ 15,000$ towards this year's research


In February while $I$ was in Costa Rica at the IUCN conference International union for the Conservation of Nature and Natural Resources) I had the good fortune to meet Prince Philip, Head of World wildife Fund International. T presented him with a Khutzeymateen grizzly bear poster and thanked him for his support for the preservation of the Khutzeymateen in his speech last Fall in Vancouver and how his words had helped elevate the Khutzeymateen to an issue of international importance. He replied "Well have you saved it yet?" and I said "Not yet, but we will". And I beliceve that we can save this unique valley with the continued support of our membership, our sponsor groups, concerned people across Canada, the United States and the world.

Vicky Husband

## ENVIRONMENT WEEK

The Friends have been promised a $\$ 1775.00$ grant from
Environment Canada for our proposed project for Environment Week May 30-June 5. We will be supplying one copy of our 12 minute video "Canada's Vanishing Grizzly" to every school district in the province complete with an information package. We will make every effort to see that the video is screened in at least one school in each district during that week. If there are Friends out there who would like to take on a project like this in your district we would be happy to release the copy through you to your district for distribution. It could be a special project for you or for children or teachers you know during Environment week. Please let us know if you'd like to help. Everyone who has seen the video has really enjoyed it.


I attended the IUCN conference for 10 days in San Jose at the beginning of February. I was able to give two slide shows on B.c. during that time and several interviews. It was wonderful to meet so many like-minded people and to exchange ideas. The conference was more political than I had imagined and thus more challenging and there was a notable split between NGO's and government represontatives. Over 90 nations attended and over 900 people.

After the conference I had the opportunity to visit some of the fantastic parks and areas that Costa Rica has had the foresight to set aside. (over $10 \%$ of their land base compared to over $5 \%$ in B.C.)

We visited Monte Verde cloud Forest a private park, a truly mystical world full of towering trees laden with epiphytes and bromeliads and hiding all kinds of birds, we could hear their songs but not often see them. We did see the rare resplendant quetsal, an incredible bird with a long iridescent blue- green tail and various monkeys and orchids and so much more.

We also went to Santa Rosa in Guanacaste province in the northwest area of costa Rica. It was very hot but as many of the trees had shed their leaves as it was the dry season it was much easier to see the parrots, monkeys, coatimundis, peccaries, guans, etc. as well as the amazing large trees. on the beach we saw fresh turtle tracks from the night before.

We visited the coastal rain forest parks of Manuel Antonio and Corcovado on the Pacific as well as Tortuguero on the Atlantic side where we saw toucans and sloths and had great jungle boat adventures.

Finally we spent 5 days seeing friends with the Smithsonian in Panama, luckily just before the trouble erupted there. We, of course, visited the Canal and also Baryo Colorado Island, where much of the research done by the smithsonian takes place. We also flew to the San Blas Islands, home of the Cuna Indians.

I don't think I have ever been on a trip where we have seen so much wildife and such different vegetation. Costa Rica is a very peaceful country with very friendly people and no standing army. I will be giving a slide show on my trip on May 3 at Camosun (see details later in issue).
-Vicky Husband

This was the best annual general meeting in the history of the Friends. The day was sunny and our lunch spread on a mossy knoll half way up Mount Work was delightful.

Afterwards we got down to business and there were enough people for a quorum. The executive were elected by acclamation and Wilf Medd, membership secretary, reported that out of 224 paid members in 1987112 had renewed with 47 new members to date.

Brian Pinch, the treasurer, reported that in 1987 we raised $\$ 62,000$ and spent $\$ 62,000$ so fund-raising efforts must be renewed.

The priorities for 1988 include:

1. The Khutzeymateen - complete field work and research
2. Education - using the resources of the Canada Life Insurance affiliation in Operation Lifeline in the schools as well as the recent federal government grant to duplicate the Khutzeymateen video for all school districts in B.C.
3. Membership and volunteers
4. Field trips
5. Fund-raising

Under new business a member of the Concerned Citizens of Saltspring Island talked about a proposed road in a small portion of the Mount Tuam Ecological Reserve. A resolution was passed: Be it resolved that the Friends of Ecological Reserves support the Concerned Citizens of Saltspring Island in their defense of the Ecological Reserves Act and Requlations at the Mount Tuam E.R.\#16.

Many thanks to Hank Stirland, Aileen Harman, Sharal Hall and Jean McKinley who attended the meeting and to Vicky for playing host.


Saturday, April 23: MOUNT TZUHALEM
A hike is planned to Mt. Tzuhalem Ecological Reserve near Duncan to see wildflowers, Garry oak groves, and the new fence protecting the reserve. (The fence is of particular note as it was partially funded by Friends of Ecological Reserves). This trip will be led by Aileen Harman, Trudy Chatwin, and Jean Stoner. Mt. Tzuhalem is the finest example of Garry oak woodlands and associated wildflowers in B.C. The camas and sea-blush should be beautiful. Meet at 10 am at somenos Nature and Information, just north of Duncan on the Island Highway. Contact Jean Stoner - 656-9240.

Saturday, April 30 \& Sunday, May 1: LASQUETI ISLAND
A weekend trip to Lasqueti Island Ecological Reserve. This trip should be exciting and rewarding. We will take the $9: 45$ am ferry from French Creek to Lasqueti Island on Saturday. Mike Humphries and other Lasqueti residents will pick us up since the ferry does not take cars. We will hike to Lasqueti Reserve and visit the newly created Squiddy Bay Park. We plan to camp overnight near the reserve and then return to Vancouver Island on the 4:00 pm ferry.

Lasqueti Island was set aside in 1971 to protect rare plants and record sized Rocky-mountain juniper. It is one of the driest habitats within the Coastal Douglas-Fir Biogeoclimatic Zone. Unfortunately it has been badly overgrazed by feral goats. In 1977 and 1987 fences were constructed to keep goats out. We hope to see recovery of the plants and be able to compare vegetation in and out of the reserve. Please contact Jean Stoner at 656-9420 for further information.

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Sunday, May 29: MOUNT TUAM
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Celebrate the first day of Environment week at the Mt. Tuam Ecological Reserve on saltspring Island. This is a reserve of fine second growth Douglas Fir with lovely stands of arbutus and a fine view of the Satellite Channel Ecological Reserve.

Meet on the 10:15 ferry from Swart Bay or join members of the Concerned Citizens for Saltspring at Fulford Harbor upon the Ferry's arrival. For more information call trip leader Jeannie Stoner, 656-9420.

FIELD TRIP NEWS: Jeannie Stoner has agreed to be our new field trip chairman. She is a great outdoors person with experience as a Parks Canada Warden with specialties in botany and geography.

We hope to sponsor a trip to Bootanje Valley near Lytton during the summer and to Robson Bight in september. Phone the Friends' office for details (386-8644).


## NOTICEBOARD

Trudy Chatwin is guiding the following field trips to Ecological Reserves and coastal natural areas sponsored by the university of Alberta Extension Education Program:

May 1 to May 6, 1988 - Spring flowers and marine life of Gulf Islands. Gabriola to Galiano Islands by kayak, with one night at Yellow Point Lodge.

September 8 to september 12,1988 - Killer whale watching and visiting kwakiutl villages oft northern vancouver Island,

Trudy will guide a field trip to Rose spit and Yakan Point Ecological Reserves on the Queen Charlotte Islands in the week following August 8 if there is enough interest. For more information on any of these trips call Trudy at 592-3559 or write to her at 2584 Thompson Road, Victoria V8L 3L3.

## UPCOMING EVENTS

Thom Henley will present a slide show entitled "Trekking the Emerald Forests" on Tuesday, April 26 at $7: 30$ at the Newcombe Auditorium. The lecture which is sponsored by the sierra club will focus on the tropical rainforests and indigenous people of Sumatra, Malaysia and Thailand which Thom explored on his recent trip. There will be an admission fee of $\$ 3$.

Costa Rica slide show by Vicky Husband: Tuesday, May 3 at 7:30 at Camosun College (park in the first lot on the left off Foul Bay Road past Lansdowne). Admission is free.


386-8644

## NEWS from the ECOLOGICAL RESERVES OFFICE

An upland portion of 412 hectares has been added to the already existing 1,248 hectares of water in the Robson Bight E.R. \#111. This brings the total area of the reserve to 1,660 hectares. The new upland portion will protect the whales from possible industrial development in their forest surroundings. It includes the Tsitika River Estuary which is a staging ground for salmon and is used by many animals including the Roosevelt Elk.

1,320 feet of fencing have been completed on the Mount Tzuhalem reserve \#112. Thanks go to the Friends who donated $\$ 3000$ toward this project.

The Guide to the Ecological Reserves in B.C. has been completed. Only a limited number were published but it will be avallable at university and public libraries. The friends' office will also have a copy available to any member who wants to see it.

John Pinder-Moss is preparing for three regional wardens' meetings instead of the usual annual general meeting. The first will be held in Nanaimo from April 8-10, a second at Kamloops April 29-May 1, and the third in Prince George May 13-15. The meetings will include reports from the wardens, a panel discussion on promoting Ecological Reserves for educational uses, scientific research, and for general interest, and a talk by Mr. Ted Foster, an ex-RCMP officer and currently representing Park Headquarters, on safety and enforcement of regulations in the reserves.

At least eight research permits have been issued for work in the Ecological Reserves. These include one for archaeological research in the UBC Endowment Lands, one for whale observation in the Oak Bay Islands and Race Rocks, and one for a water fowl survey in Narcosli Lake \#53. Under this program Hiromi Minakuchi will film whales in Robson Bight and Jane Watson will study sea otter population and eating habits in Checlesat Bay \#109.

Brackman Island off the Swartz Bay ferry slip has been bought by the Nature Conservancy and will be turned over to the Nature Trust who will lease it to the Ecological Reserves program. This small island is unique in that it has never been grazed by sheep so its vegetation and spring flora are truly intact.

Future plans include finishing the fence at westwick lake Reserve \#35. Research permits will probably be issued for work on the marmots at Haley Lake \#117 and stickleback fish at Drizzle Lake \#52 on the Queen Charlotte Islands.


## FIELD TRIP REPORT

Race Rocks: On March 13 th the Friends paid their annual visit to Race Rocks Ecological Reserve and Lighthouse, located southwest of Victoria. Gary Fletcher. the Marine Sciences teacher from Lester Pearson College of the Pacific, an Australian student named Peter, and three divers accompanied the group of 19 Friends to Race Rocks in the Pearson College boat "Uba-Tuba".

The day was calm with partial cloud and patches of sunlight streaming over the sea. Bird life was abundant. On the way over we spotted two Rhinoceros auklets, feeding flocks of gulls and cormorants, pigeon guillemots, Hooded mergansers and an immature Bald eagle perched on West Race Rock.

Gary told us about a film maker who had recently lost her boat and nearly her life while trying to film sea lions underwater at West Race Rock. Gary also noted that sea lions were not as numerous that day compared to the usual winter
hoards. Most of the sea lions present were hauled up on a rock near Great Race Rock. Both the lighter coloured and larger Northern sea lion and the darker coloured barking California sea lion were present and gave the young kids a thrill.

We were taken on a tour of the Race Rocks Light station and Lighthouse. It is the oldest lighthouse on the west coast dating from the 1860's but it is kept in immaculate order by Charles and Joan Redhead. Although one might think of lighthouse duty as lonely and monotonous, at Race Rocks this is far from the case. Scuba divers, Pearson College students, fishermen, sea lions, sea-birds, and even killer whales frequent Race Rocks. While we were there a Pepsi-Cola stagecrew was trying to set up a laser platform for a commercial which may star Michael Jackson.

While the Friends were exploring Great Race Rocks, student divers were bringing up underwater creatures including sea stars, sea urchins, whelks, a Gum Boot chiton, sea anemones, abalone, and hydrocorals for everyone to feel, see, and even smell.

During lunch we witnessed the tidal change and the waters "raced" in standing waves and whirlpools towards cape flattery. Oyster catchers, Harlequin ducks, Glaucous winged gulls, White-winged scoters, and cormorants provided additional interest.

On the return trip we got a close look at over 20 Brandt's cormorants in their nuptial plumage. Beautiful plumelike feathers adorn their iridescent long necks. Students drove the "Uba-Tuba" past a large group of Harbour seals hauled out on smaller rocks. While we watched auklets, Great blue herons, buffleheads, gulls and cormorants feeding offshore of Rocky Point Military Reserve. Gary related a plan by the Canadian Armed Forces to conduct "showcase logging" in this reserve. Rocky Point Reserve is one of the best and certainly the most extensive example of the Garry Oak/Douglas fir/Arbutus Ecosystem type within the Coastal Douglas Fir Biogeoclimatic Zone. Rocky point was proposed to hecome an Ecological Reserve at the onset of the Ecological Reserve Program, but was turned down due to its military status. Up until this time the character of the area has not been significantly threatened. We feel it is too bad that Rocky Point will be logged, especially considering that no revenue is expected from the logging. If you feel strongly about this plan please write immediately to:

Admiral
Canadian Forces Bases
Esquimalt, B.C.
cc: The Honorable Perrin Beattie
Minister of Defense
ottawa, ontario
After returning to Pearson college we toured the marine sciences laboratory saltwater aquaria and viewing trays filled with interesting and unique underwater animals. Many thanks to Gary Fletcher and the Pearson students for a truly wonderful trip.
-Trudy Chatwin


## SPECIAL EVENTS REPORT

On March 25 in Victoria and March 26 in Vancouver the Friends presented Dr. John Schoen, noted wildife research biologist with
the Alaska Department of Fish and Game. He gave an inspiring and informative lecture on "Wildlife and the old Growth Forest in Southeast Alaska".
Dr. Schoen has said that "Today old growth is a rare and diminishing national resource. Because it takes centuries to develop the ecological attributes of old growth, the biological effects of clearcutting are cumulative and long term. As old growth forests are harvested our future management options are reduced."
I think these comments apply as well to B.C. although as Dr. Schoen pointed out, we have less time here to protect our remaining old growth forest than they do in Alaska.
On behalf of the Friends I would like to thank Dr. Schoen for donating his precious time to come down from Alaska to speak to us about his research.
Vicky Husband

## WARDENS' LETTERS



Along with their last newsletters all volunteer wardens received a request for short articles describing their reserves for the benefit of our members. I received the two following letters and will publish more as they come in.
-Editor

Dear Editor,

Look at a map of B.C. and fly like an eagle to the extreme northwest coastal portion and out 60 miles across wicked Hecate Strait to the Queen Charlotte Islands which we call the Haida Gwai (Islands of the People). Then fly south along the islands' backbone to the very southern tip and turn north on the west coast for 12 miles to reach Skung-gwai (Red Cod Island also called Anthony Island) about 3 miles off the coast of kunghit Gwai (Island to the South).

The main island of Skung-gwai is about one mile long and very narrow ( 15 minute's walk if you know the trail and over four hours if you wander) with its main rock features running north and south. Anthony Island Ecological Reserve \# 95 includes 20 small islets with nine species of nesting seabirds and rich marine life in a very picturesque setting. On your left as you face north is Japan and on your right is Haida Gwai.

Throughout the nesting season from May through August many worried birds lose ounces performing their hectic parental duties. The nesting birds are preyed upon by bald eagles and falcons. Often a bald eagle casually flies over the nesting areas or perches nearby with other prey in mind, but soon he has to fly away. The Gull people rise like a huge white crying cloud with multitudes of flashing wings. They compete with each other to be the first to dive bomb the screaming eagle who crouches low under the weight of the combined attack or escapes in a rolling, twisting turn with impossibly fast wingbeats.

The islands have steep slopes that plunge into the icy cold depths. Between the many islands are shallow places filled to the brim for a seafood loving Haida. There are also lovely areas for casual scuba diving but watch out for the huge bull killer whales that sometimes cruise these shallow waters in search of plump seals that love these parts.

Should you attempt to land to wander around on shore watch the play of the surge of the Pacific that stretches unbroken right from Japan and pick your landing area with care. Wherever you walk look before you step. Throughout the coastal fringe vegetation of salal, tall grass, and wind-sculptured low trees are thousands of burrows of seabirds such as Puffins, Cassin Auklets, Ancient Murrelets, Rhinoceros Auklets, Pidgeon Guillemots, Seagulls, Cormorants, and Oyster Catchers. Never walk upon these sites!! Many small migratory birds drop by for a chat and fluff to sit and brood before the next leg of their journey.

Whenever visitors from off island approach me about how to best experience any of Haida Gwai, especially ecological reserves, I tell them, "First you have to slow down. No more of that competitive nine to five feeling. Out here the times are anytime in the day between pre-dawn light and sunset. And you have the quiet evenings to allow your over-taxed vision to relax and allow your hearing to feast on the many evening calls of homeward bound birds that gradually fade into the crackling campfire."

And of course ecological reserves filled with worried parents caring for a new brood do not need people walking across their homes and possibly crushing their young. These are the Winged People who deserve consideration and admiration. Their lot in life is so staggering to the imagination that we always turn off our minds and act without sense. This causes tremendous suffering through the stress of our presence or pain through a careless step.

And when in the realm of the ocean People drink in their beauty and do not overreact with thoughtless acts for you could suffer. You are out of your element and in a harsh world that is unforgiving and many times takes the supreme toll.

I thank Nature's abundances for the many pleasure filled hours amongst so many consider good People. Many are the stories in my heart which have created a feeling of love as they dissolved in my memories. Howa!!
-Wanagun (Richard S. Wilson)


Dear Editor,
My Ecological Reserves are like my children. I love them all but $I$ never seem able to do much for them.

My first child was No.89, a stretch of two or three miles halfway down the Skagit River between Sumallo Grove (Hope-Princeton Highway) and Ross Lake Road. Its cottonwoods are its pride. It seems they have the genes for extra long fibres. Fire could endanger them but few hikers pass through and, of course, fishing is not allowed. I knew the river 40 years ago when it was wilderness fishing, it was good to my family. I like to feel I can do something for it now.

Last year I was handed three more orphan reserves on the Skagit (Gail Ross looked after them before going to Prince George). The least interesting just misses including rhodendrons in its boundaries; the next is impossible to reach because it is on the other side of the Skagit a longish way above the Chittenden Bridge; the third is located on the US border and contains an unusually southerly-westerly Ponderosa Pine which I hope to find next summer. It also has rare steershead plants, very tiny, related to Bleeding Hearts in a second or third-cousin kind of relationship. I have not found them yet.

Yes, I love my children. They give me an interest and an activity and a sense of doing something for natural lands. They have taken me on hikes and explorations I would not otherwise have known.

-Joan Greenwood<br>E.R. \#89, 21,22,106

## LETTERS TO MOTHER NATURE

[My daughter's sixth grade class had a recent assignment to imagine that each one of them was the last of an endangered species. They were to write a last letter to Mother Nature explaining their feelings about being the last one of their kind alive, giving the details of what happened to their family and an explanation of why they died. My daughter wrote the following letter. If this sparks a response from any Friends' children we will publish the letters in the next issue. - the Editorl

Dear Mother Nature,
I am a lonely Grizzly Bear cub. I live in the
Khutzeymateen. My mother got shot by a hunter a few days ago. I am very hungry. The fish are dying from water pollution. When I stand still I can hear the water ripple in the burning sun but all that silence is disturbed when the logging trucks zoom by on the dark and dusty roads. I can hardly breath the mill gives off such ghastly smoke. Please help me, Mother Nature.
singed, A Lonely Little Bear


WITH A LITTLE HELP FROM OUR FRIENDS

Recently Wilf Medd recieved the following letter from Mrs. Mary Lou Richardson's class at the Merrickville School near ottawa.

Dear Friends,
We have had a rummage sale to raise money for the Grizzly Bear. We are sending $\$ 20$ for the Grizzly Bear and we are adopting a burrowing owl in Ontario. We hope we can save alot of Grizzly Bears. Thanks for the booklet.

From Mrs. Richardson's class

And on the subject of endangered species, we were recently given a game called "Save the Whales'". It is unusual because the players work together to save as many whales as possible from extinction during the course of each game. Players learn about the whales' characteristics, their habitat and the threats to their safety. Playing the game really fosters the idea of working together towards a common goal, quite an achievement in our competitive culture.
"Save the Whales" is manufactured by Animal Town Game Co., P.O. Box 2002, Santa Barbara, CA 93120, USA. They also produce several other cooperative games which $I$ haven't seen and they will send a free catalogue if you drop them a line.


FRIENDS SECRETARY FINDS PERMANENT JOB
The Friends are indebted to Bonnie Taylor who worked in the office for five months on a part-time basis getting files in order, organizing procedures and handling correspondence. Bonnie found a permanent job with a private care center in Saanich. Although we are truly sorry to see Bonnie go we were thrilled that she found a full-time job. We wish her all the best in the future.
-Lynne Milnes

## VOLUNTEER HELP NEEDED

We are in the process of reorganizing our mailing list and transferring it into a new computer. The friends need someone who can help alphabetize and type out about 350 members' names and addresses. We should be able to get this done in a day. Anyone interested please call Dorothy Field at 743-5358.

## NEW MEMBERS

The Friends would like to welcome the following new members:
Nadine Adam, Burnaby
Mazie Burns, Guelph, Ontario
Cathryn Corbett, Victoria
Blue Waters Adventures Corporation
Vancouver
Jane Daborn, Vancouver
Derek Davies, Toronto, ontario
Diane Hansen, North Burnaby
George Heffelfinger, Victoria
Dennis Kynaston, Richmond
Michael \& Jackie Morris, Golden
Margaret Rose, Coombs
J. Sherlock, North Vancouver

Heather Anne Thurber, Alert Bay
Max Uhlemann, Victoria
Donna Underhill, Richmond
Samantha Walsh, Courtenay
Bis Whitby, Ganges

The following is the questionnaire for the staff meeting of the Ecological Reserves staff meeting in october 1987. It was so informative that we thought our readers might like a go at it. -Editor

1. Which province passed the first Ecological Reserves Act in Canada?
a) Quebec
b) Manitoba
c) British Columbia
2. The B.C. Ecological Reserves Program evolved in the mid-1960's from:
a) the International Geophysical Year
b) Man and the Biosphere Programme
c) the International Biological Programme
3. The B.C. Ecological Reserves Act and Regulations were passed by the B.C. legislature in:
a) 1971
b) 1969
C) 1975
4. Who was the individual who almost single-handedly started the Ecological Reserves Program in B.C.?
a) Brian Smith
b) Ray Williston
c) Dr. Vladimir Krajina
5. Ecological Reserves are selected to (True or False):
a) protect beautiful viewpoints for hikers
b) protect rare plant or animal species
c) offer permanent outdoor laboratories for $\qquad$ research and education
d) protect logged areas
e) protect benchmark areas untouched by man
f) protect "average", run-of-the-mill examples of our ecosystems
g) protect plant/animals to provide unique
$\qquad$ recreational opportunities
6. How many Ecological Reserves are there?
a) 113
b) 110
C) 117
7. Name the rare plant and the rare animal protected in the two most recently established reserves.
8. Name one marine and one flower reserve located within one hour's drive from Victoria.
9. What endangered mammal species is protected at Checleset Bay on the west coast of Vancouver Island?
a) gray whale
b) Stellar's sea lion
C) sea otter
10. What type of reserves are closed to the public except by permit?
a) reserves which protect rare species
b) sea lion rookeries
c) sea bird colonies

Why?
11. The Robson Bight Ecological Reserve was created mainly to:
a) protect killer whales
b) protect marine environment
c) protect special beaches
12. Some ecological reserves protect representative ecosystems. Match the following reserves with the ecosystem they protect.
a) Nitinat Lake, V.I.
b) Smith River, near Yukon
c) Hayne's Lease, near Osoyoos
d) Gilnockie Creek, East Kootenays

1. mature Western larch
2. semi-arid vegetation
3. coastal Douglas fir
4. black and white spruce forest
5. B.C. Ecological Reserves include a total of:
a) $116,000 \mathrm{ha}$
b) $155,000 \mathrm{ha}$
c) $241,000 \mathrm{ha}$
6. Marine reserves cover approximately:
a) 33,000 ha
b) $47,000 \mathrm{ha}$
c) 65,000 ha
7. The largest ecological reserve, Gladys lake, covers alone:
a) 3000 ha
b) 7523 ha
c) $48,600 \mathrm{ha}$
8. The smallest reserve, Canoe islets near Valdes Island, includes:
a) 0.6 ha
b) 2.1 ha
c) 6.3 ha
9. How many official ecological reserve proposals are still "on the books"?
a) 57
b) 140
C) 375
10. How many ecological reserve proposals were reviewed by the Wilderness Advisory Committee?
a) 5
b) 7
C) 13
11. Which two of the listed proposals are now included in National Park Reserves?
a) Cheewhat Lake
2)Kitchi Creek
c) Windy Bay
d) Dewar Creek
12. The selection of terrestrial ecosystems reserves is mostly based on the following classification scheme:
a) landforms
b) biogeoclimatic zones
c) capability inventory mapping
13. Which ecological reserve proposal aims at protecting: a) the tallest Douglas firs in the world?
b) grizzly bears?
14. What other staff member, besides E.R. staff, is involved in the development of management plans for ecological reserves?
15. Who manages ecological reserves?
a) E.R. staff
b) Parks staff
c) Volunteer Wardens
d) all of the above
16. How many E.R. volunteer wardens are there?
a) 45
b) 60
C) 83
d) 87
17. Who controls the management of finfish in marine reserves?
a) Provincial Fisheries Branch
b) Ecological Reserves Program
c) Federal Fisheries and Oceans
18. When an ecological reserve is located within a provincial park, which statute applies to this reserve?
a) E.R. Act
b) Park Act
c) both
19. Hunting or fishing may be permitted in ecological reserves. True or False.
20. The following activities are permitted in ecological reserves. True or False.
a) camping
b) hiking
c) picking up fossils or stones
d) developing a trail
e) building a cabin
f) burning/fires

21. The management of four ecological reserves has been specifically delegated by order-in-Council to the Park Programs Branch. Name these four reserves.
22. In an ecological reserve, it is legal to:
a) carry a firearm
b) drive through with your car
C) prospect for minerals

23. What penalties can be levied against persons breaking the Ecological Reserve Regulations?
a) a $\$ 500$ fine
b) jail term
C) both
d) neither
24. Trees are blown down in ecological reserve and become a source of insect infestation. Since all ecological reserves are Crown Land, anybody may salvage the downed timber.
True or False?
25. How closely can you approach a whale in:
a) Robson Bight Reserve
b) Johnstone strait
26. How many reserves were fenced/ditched in 1986, 1987?
27. How many publications are available to the public which document ecological reserves or the Program in general?
a) 2
b) 5
c) 9
d) 12
28. Approximately how many publications/reports have been produced in or about ecological reserves?
a) 175
b) 300
c) 350
d) 425
29. Approximately how manuy slides are in the eoological Reserves Program slide collection?
a) 5500
b) 7000
C) 9000
30. Where in our office can one find the following information about a specific reserve:
a) maps, legal plans
b) publications/reports
c) correspondence
d) list of plant/animals
e) name of volunteer wardens
f) slides
31. How many research projects are taking place in ecological reserves in 1987?
a) 7
b) 17
c) 27
d) 31
32. How many research projects were subsidized by the Ecological Reserves Program in 1987?
a) 1
b) 2
C) 3
d) 4
33. Match the following reserves and research subjects:
a) Robson Bight 1) threespine stickle back
b) Cleland Island and red-throated loon
c) Campbell-Brown
2) Vancouver Island marmot
d) Drizzle Lake
3) rattlesnake
e) Haley Lake
4) forestry
f) Morice River
5) killer whale
6) sea bird colony
42. For which ecological reserve has the greatest number of research permits been issued in any given year? How many?
a) 5
b) 11
c) 13

Answers to Ecological Reserves Program Questionnaire

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1.C, 2.C, 3.C, 4.C, 5.a:F,b:T, C:F, d:T, e:T, F:T, g:F
6.c, 7.Vancover Island Marmot, Phantom Orchid
8. marine: Race Rocks, Oak Bay Islands, Ten Mile Point;
    flower: Mount Tzuhalem, Oak Bay Islands, Mount Maxwell
9.c, 10.a,c, 11.c, 12. a:3, b:4, c:2, d:1, 13.b, 14.b, 15.c
16.a, 17.b, 18.c, 19.a,c 20.b, 21.a:Nimpkish Island;
    b:Khutzeymateen River 22. Roger Norrish 23.d, 24.b
25.c, 26.a, 27.T 28.a:F, b:T, c:F, d:T, e:T, f:F
29. Rose spit, Tow Hill, Gladys Lake, Robson Bight
30.a:T,b:F,c:F 31.d, 32. F, 33. a:300m;b:100m
34. Tranquille, McQueen Creek, Lasqueti Island, Mount Tzuhalem
35.b, 36.c, 37.a, 38. a,d,technical file; b,E.R. library;
    c,file room; d, correspondence file; e, slide cabinets
39.c, 40.b Haley Lake; Study of genetic viability of marmot
    populations - A. Bryant; Robson Bight: round-the-clock
    study of number of whales using the rubbing beaches
41. a:5; b:6; c:3; d:1; e:2; f:4; 42. b Robson Bight
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## EDITOR'S POSTSCRIPT

This is my last issue as editor. Joseph Blake is helping me get it together and will take over from here. I feel like I'm just starting to have a feeling of how to do this and am even beginning to enjoy it (well most of it) but in July I'm leaving with my family for a year in Asia. If we come across some relevant items maybe we' ll file material from there - I've always wanted to be an internatinal correspondent.

By the time you get this the spring flowers will well on their way. On our last extended trip it was visions of Mt. Tzuhalem's mille-fleur elysian fields and the carpet of pink lilies under the giant spreading maples at Honeymoon Bay that haunted me when $I$ wondered if I'd ever want to come home. It's nice to know they'll be here and that the cycle will continue wherever we are. And that they will draw us back again.

- Dorothy Field


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