

The Log

Summer 2003

FRIENDS OF ECOLOGICAL RESERVES NEWSLETTER

Attention All Wardens

Remember when ecological reserve wardens met every year to discuss important ecological issues, and to learn about plants, animals and research projects, as well as other provincial reserves? Remember when we also used to gather together regionally and learn about each other and each other's work? We'll gather again, thanks to a great deal of enthusiasm and follow-through by Eva Durance and Bev Ramey, and encouragement by myself, Peggy Frank. The three of us form the volunteer planning committee for the First Annual Wardens Meeting of the new Millennium.

The Gathering (Sept. 5, 6 and 7 in Kamloops) is in response to numerous requests from the wardens. Volunteers from Friends of Ecological Reserves and the BC Federation of Naturalists have found limited funding. A great deal of the commitment to attend will have to come from you – the wardens. If you have funding requirements or better yet funding suggestions, or best of all, know a willing philanthropist, please e-mail me at pegfrank@telus.net. The organizers will try to help out with expenses incurred getting to Kamloops. We have also arranged to provide food during the Saturday meeting day. You

will need to arrange a place to stay during the Gathering. There are campgrounds, a few hotels and perhaps there are even people in Kamloops who would be willing and able to billet participants. If you can make this part of a late summer holiday, we strongly encourage you to do so. But most importantly, we want you to come.

The program for the Gathering is exciting. Friday evening, after registration (registration forms are provided on Page 3 of this newsletter) Rick Searle will provide insight into the situation in BC and encouragement for the volunteer warden program.

On Saturday morning, government personnel will address issues relating to the role of wardens in the Province's Ecological Reserve system, as well as who to contact in headquarters and the regions. Early Saturday afternoon, experienced wardens will discuss a variety of topics ranging from past experiences, to expectations, to research. If you are an experienced warden, you may be hearing from the planning committee very soon.

Wardens will have identified matters of concern and later in the afternoon they will break into small groups to discuss these matters and arrive at some plan of action. Summaries will be presented in the evening, and a guidebook for wardens will be discussed.

There will be a surprise Saturday night. You will need to attend the Gathering to find out more about this surprise, unless you are willing to wait for our next newsletter.

Sunday will be reserved for educational field trips to local Ecological Reserves, where there will be more time for exchanging ideas and information. ■

What: The Gathering – an interactive meeting of ecological reserve wardens and potential wardens

Where: the Henry Grube Centre (directions upon registration), Kamloops

When: September 5 – evening
September 6 – 8:00 am – 9:00 pm
September 7 – field trips – 9:00am – noon

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The LOG is published 3 times a year by the Friends of Ecological Reserves to promote the establishment, management and maintenance of Ecological Reserves in British Columbia. The LOG is distributed to members, volunteer wardens, affiliates, supporters, government, friends and the enquiring public.

The views expressed in this newsletter are not necessarily those of the Friends.

Articles for publication are invited. The deadline for submissions for the next issue of The LOG is November 1, 2003

Editor

Denise de Montreuil

Design and Production

Indigo Sky Graphic Design

Directors

Don Eastman, *President*

Peggy Frank, *Vice President*

Nichola Walkden, *Treasurer*

Tom Gillespie, *Membership Secretary*

Saila Hull, *Recording Secretary*

Lynne Milnes

Tom Gillespie

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Marilyn Lambert

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Bristol Foster

Saila Hull

Peggy Frank, *Past President*

Honorary Directors

Robert Bateman

V.C. Brink

Trudy Chatwin

Vicky Husband

Josette Weir

Contributors to this issue:

Lynne Milnes, Peggy Frank,

Evelyn Hamilton, James Miskelly,

Malcolm Martin

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FRIENDS OF ECOLOGICAL RESERVES

PO BOX 8477 STN CENTRAL

VICTORIA BC V8W 3S1

E-mail: ecoreserves@hotmail.com

Websire: <http://www.ecoreserves.bc.ca>

Canada Post Agreement No: 1060163

PRESIDENT'S MESSAGE

It's been the best of times and the worst of times.

While it is cliché, there is no better way to describe this past year. For Friends of Ecological Reserves the past year has been one full of concern about the state of the Province's Ecological Reserves. We have seen the government cut programs that have a huge impact on the ability of the Province to protect and to educate. Research programs were cut long ago. We have seen government promote "partnerships". The result has been increased costs to the people of BC for park use and pressure to "use" even those areas protected as Ecological Reserves. Friends have voiced opposition to the commercial use of Ecological Reserves and we have tried to discourage pipeline development through one Ecological Reserve. For the first time I can remember we have sought legal advice about how to ensure that the ideals of the Ecological Reserves Act are applied. We have reported the impacts of clear-cutting trees adjacent to ecological reserves and worked with a committee of people to encourage the federal government to take **all** the committee's advice and establish a marine protected area around Race Rocks Ecological Reserve.

On the positive side Friends have continued to receive support from a host of wonderful donors and they have enabled us to support another year of research into the relationship between the health of salmon streams and the animal interactions around them. We have also seen research continuing on sea otters, fungus, insects and birds. We have helped support two students at UVic through the Vicky Husband scholarship. We have heard about the impact of forest encroachment and development on butterflies. We have also heard that although resources and staff have been cut, the Minister of Water, Land and Air Protection is committed to doing what she can to protect the province's biodiversity. And we have continued to work closely with the dedicated staff at the Ministry. We have seen neighbourhoods determined to have a say in how "their" Ecological Reserve is managed and seen the government follow through and meet with the community to develop a locally acceptable relationship. We have continued with our beach clean-up and educational field trips to Trial Island Ecological Reserve.

Friends of Ecological Reserves have developed their own partnerships and through working with the Federation of BC Naturalists we have planned an event that we have dreamed about for years – a provincial Warden Gathering. So while it has been a tough year to be president of Friends, it has also been a wonderful year. ■

– Peggy Frank, Past President



PHOTO CREDIT: DAVE QUINN

Visit www.ecoreserves.bc.ca

Ecological Reserve Warden Meeting – The Gathering – September 5, 6 & 7 – Kamloops

Volunteers Eva Durance, Bev Ramey, and Peggy Frank have been planning this provincial gathering, jointly sponsored by The Friends of Ecological Reserves and the Federation of BC Naturalists, to be held at the Henry Grube Education Centre in Kamloops. Friday evening's keynote speaker will kick off a great weekend of presentations, discussions and social time.

Senior government staff will be speaking Saturday morning on the current system as it relates to ERs, and a panel of wardens from different Regions will present their perspectives on a variety of topics of specific concern: changes in the warden system, access to ERs, invasive plants, research opportunities, etc. There will also be small group discussions and lots of time for questions and answers. Educational field trips will be held Sunday morning.

To make firm commitments on meeting rooms, accommodation and catering, we need to know as soon as possible approximately how many people plan to attend. Please return your completed registration forms as soon as possible: *We would greatly appreciate receiving them by August 8, 2003 at the latest.* Thank you for your cooperation. ■

ER Warden Gathering Registration Form

Please send to: **ER Warden Gathering, c/o Federation of BC Naturalists
Suite 307, 1367 W. Broadway, Vancouver, BC V6H 4A9**

Name(s): _____

Address: _____

E-mail: _____

Phone: _____

I would like to attend the Gathering. My \$20 registration fee is enclosed. Cheque should be made out to the FBCN, but please note that it is for the wardens' meeting on both the envelope and cheque. (Note: funding support has been applied for and we are hoping to be able to contribute substantially to travel and accommodation costs for all those attending. Updates on this will be forwarded to you.)

- I need accommodation I do not need accommodation
 I would like to camp I would like to book a hotel
 I would like to be billeted

I am warden of ER# _____, the (name) _____
Ecological Reserve.

I have been a warden for _____ years.

- I would like to attend as a prospective ER warden
 I will arrive for the Friday night, September 5 wine and cheese reception and guest speaker, and would like to participate for the entire three days.
 I will arrive Saturday morning, September 6 and would like to participate in events Saturday and Sunday.
 I will only attend the Saturday Talks and workshops.
 I would like to participate in the ER educational experience on Sunday, September 7.

If you have particular matters you would like brought out at the meeting, please write these in here and we will accommodate as many as possible:

Questions? Please call Peggy Frank at 250-519-0040 or e-mail pegfrank@telus.net
OR Eva Durance at 250-492-0158 or e-mail edurance@vip.net

Butterflies on Vancouver Island – A Tale of Woe

by James Miskelly

The story of butterflies on Vancouver Island is truly a tale of woe. While most people assume in a casual way that the excesses of modern culture must have taken their toll, and some have seen numbers drop in their lifetimes, the true scope of the problem is nothing less than staggering. This is revealed in the writings of some of the first entomologists to visit Victoria. George Taylor wrote in 1884, "...the extreme abundance of [butterflies] must attract attention. Nearly forty species may be marked *abundant*...a sight such as the English entomologist, at least, never sees at home." In 1894, W. H. Danby listed, by species, almost forty species as common in the Victoria area, and even provided some context as to what he meant by common: "[Lorquin's Admiral] and [the Pine White] were very numerous...along the Cowichan River, upon the surface of which were thousands of defunct [adults] of both species." The abundance of the Pine White was also described by James Fletcher, who noted that in the frequent years of outbreaks "the dead butterflies may be seen in vast numbers floating on the sea around Vancouver Island, or thrown up along the beaches in windrows sometimes an inch or two in depth."

When we try to understand what could have happened to these clouds of flying flowers, we start by checking off the usual and comfortable suspects: habitat destruction, invasive species, pesticides. All of these have doubtless had an impact. In many cases, however, the effects of our foe are not consistent with these usual suspects. Butterflies are small animals that can survive in small patches of habitat, but they continue to be lost from long-protected habitats, even in areas relatively free of exotic species and pesticides. The fact is that even while Victoria's first entomologists were putting pen to



Taylor's Checkerspot (*Euphydryas editha taylora*)



Island Ringlet (*Coenonympha californica insulana*)

paper, changes were already in place that were guaranteed to spell doom for the butterflies.

One of the defining features of settlers is that they...well, settle. In order to settle, they require what they see as a safe and predictable living environment. This was totally inconsistent with the Aboriginal practice of setting fire to the meadows and oak woodlands as part of the management for Camas and other bulb and root vegetables. Settlers must settle, so the fires that kept the meadows and woodlands open had to stop. The closure of the meadows must have been very rapid at first, and it continues to this day. More lush and mesic areas, especially, have become dense thickets of shrubs such as Snowberry and Nutka Rose, and some areas have been transformed into forests of small Douglas-firs. The net result of this is that, without management, only the driest meadows remain. No surprise then, that many of our rarest butterflies are associated with moist meadows, including such red listed species as the Island Blue (*Plebejus saepiolus insulanus*), Island Ringlet (*Coenonympha californica insulana*), and Taylor's Checkerspot (*Euphydryas editha taylora*).

By the 1950s, there had been a complete turnaround in the writings of local entomologists. Seventy years after the time of George Taylor, W. Downes commented on how few butterflies could be found on Vancouver Island, compared with Britain. He hypothesized that "lack of summer moisture

may account partly for the scarcity of [butterflies] on the island," and noticed that butterfly numbers were particularly low in years of drought. Little did he realize that the lack of moisture and lack of butterflies was a novel phenomenon, and not necessarily a natural feature of the area.

The time to solve this problem by dropping a match is long gone, if it ever existed. In these new ecosystems, with their high fuel loads, fire-tolerant exotic species, barriers to colonization by native species, and modern cultural context, fire is rarely a viable option. What's to be done? Is it time for us to sharpen our chainsaws in the name of conservation? This leads to a whole series of other problems: How do we define natural? How can the public tell the difference between conservation and destruction? How do we justify devoting limited resources to the removal of native species, while major problems with exotic species remain? These points and others may be open to scientific and philosophical debate, but one point is not: The disruption of the original burning regime has transformed these ecosystems, to the detriment of our rarest species. ■

James Miskelly is a graduate student at the University of Victoria. A Friends of Ecological Reserves research grant supports his work on conservation of habitat for the recovery of endangered butterflies in Garry Oak meadows.

Report from Cougar Canyon

by Malcolm Martin

On the list of qualities useful to volunteer wardens perseverance must rate highly. More than a few have been with the program through thick and thin practically from its outset three decades ago. Obviously looking after one ER for a considerable length of time has definite advantages; the ground becomes known, its inhabitants familiar, and risks and problems predictable. Unfortunately it may also become over familiar, perhaps humdrum.

Wardens usually also have another trait, that of inquisitiveness, that prompts them to find out more of what makes their reserve tick, so along with personally giving time and effort in stewardship there is a personal gaining of knowledge and experience. But this too may slow with the passing of time. Would the purposes of the Ecological Reserves program, therefore, be better served if wardens could opt to change their area of responsibility if other reserves were in the vicinity? They would be challenged by new ground to explore, new inhabitants to become familiar with and new problems to understand, and would be able to view these things through the eyes of experience.

There is always a reluctance to abandon that which is familiar but perhaps the greatest disinclination to change might arise because the old reserve is conveniently near and others more distant or harder to reach. Additionally, some wardens may be less than enthusiastic at the idea of turning over all their hard work to someone else and possibly receiving little on their new reserve in recompense: these are personal qualms to put against the challenge and interest of a fresh start on new territory. In the wider picture, there is still a lot of work needing to be done.

Over the past decade Land Resource and Management Plan

(LRMP) processes have been held through much of the province, amongst other things setting aside large and small protected areas, some of which have/will become Class A Provincial Parks and others, usually smaller, may eventually be designated as ecological reserves. Just about all of these are in need of documented inventories to provide baseline information of what each contains at the start of its 'official' career, to help in formulating management needs and against which future changes can be measured. This is practical work that many volunteer wardens are capable of and would find interesting.

The writer has been volunteer warden at Cougar Canyon Ecological Reserve (#108) for many years and in addition to the usual plant and bird listing has also compiled inventories on butterflies and dragonflies, lichens and mosses. Also an intermittent Painted Turtle count is ongoing at one of the ponds following the protocol recommended by Frog Watch by recording time of day, air temperature, water temperature, wind strength and cloud cover. So long as observations follow the same route each time and roughly the same amount of time spent viewing, the routine has some validity even though not rigorous enough for a scientific study. It is beginning to show interesting results. Since 1996 a definite trend has shown up:

	Average # over all observations	Range
1996	24.0	5-30
1997	23.5	6-41
1998	33.6	7-91
1999	47.2	12-68
2000	67.4	5-134
2001	90.0	12-179
2002	no counts	

Counts made when the air temperature is below that of the water are

ignored as turtles do not emerge to bask under those conditions. Strangely the highest numbers have occurred not only under calm weather but also when the wind has been strongest as at those times turtles tend to congregate at the two ends of the pond where there is greater protection from the elements.

Is there a reason for the increase? Four possibilities come to mind:

- the tabulator has gained experience and knows where likely to spy turtles and is therefore more successful;
- predation has decreased ... as adults are rarely caught on shore, and neither birds (Gt. Blue Heron recorded only once) nor large fish are present to catch juvenile turtles in the water, this is not a likely proposition;
- climatic variability has been favourable...recent winters have been less severe than formerly leading to possible greater winter survival;
- less nest destruction...cattle have access to part of the nesting area; fewer cattle in recent years results in less trampling. Coyote excavation of nests for eggs or juveniles appears average.

Two years ago, additions were made to the reserve following acceptance of the Okanagan/Shuswap LRMP and these areas have been examined to search for new and different features, providing at the same time a little of the excitement of exploration. In another attempt to be useful several years earlier a draft for a suggested Management Plan was drawn up, not to detract from Parks' authority but to provide a basis that might be of assistance in their present deprived financial and staffing state. Resentfully received, it and all the other material seems to pass into unknown files with never any feed-back.

However Cougar Canyon is a young man's reserve, steep sided and exhausting

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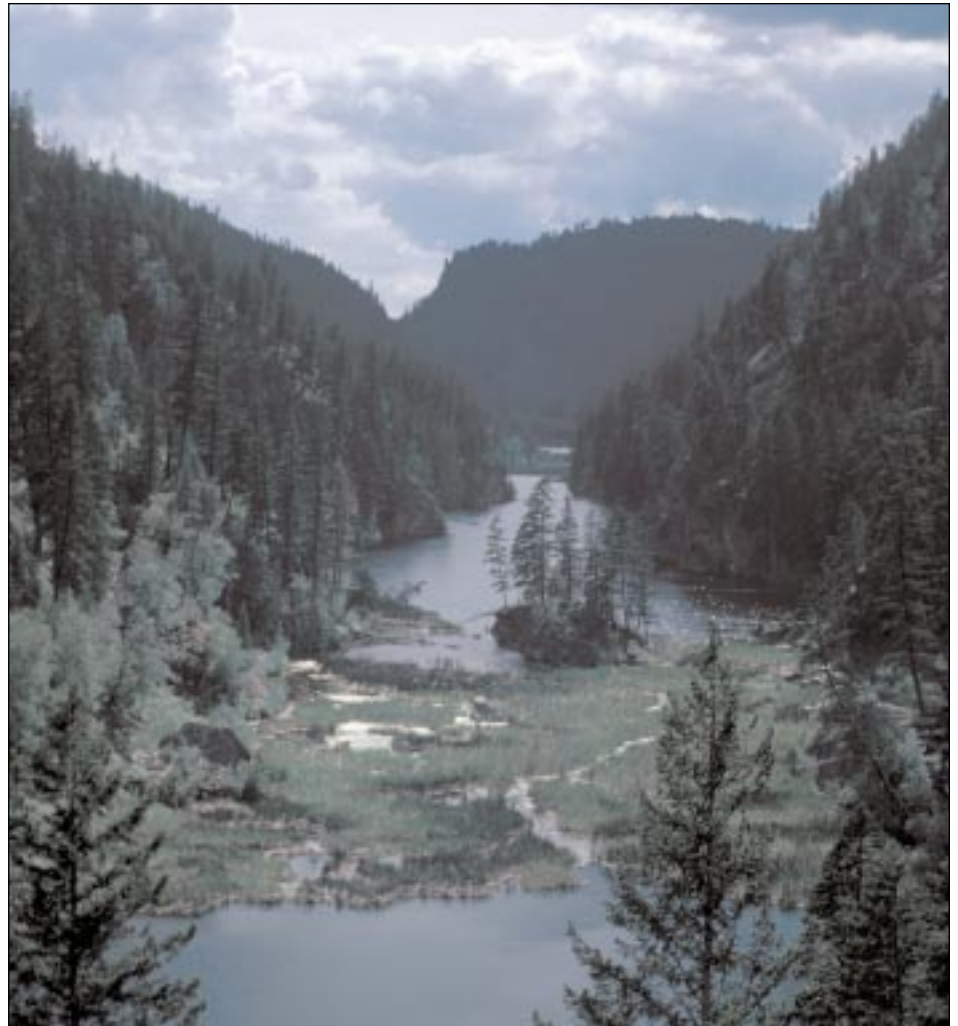
“... *Cougar Canyon*” continued from page 5
so in the interests of wind and limb more attention is now being given to a Goal 2 unit farther south above the Okanagan Valley. Its history is interesting and rather a sad story. In 1996 it was put forward in writing as an ecological reserve candidate based on a series of seasonally seepy small meadows along the top of a lava flow ending in a vegetated cliff. Spring wetness followed by summer baking makes for specialized growing conditions and a number of provincially rare plant species are to be found there. Because a local LRMP was on the horizon the proposal could not be dealt with under the prevailing ER candidate mechanism and had to wait more than 2 years to be included in the new process. At least two more years passed for the LRMP to reach its final stage followed by another wait for the Cabinet to accept it. Since that time in excess of another two years has passed and still implementation procedures have not legalized this or other successful Goal 2 units. It is now approaching eight years since the original proposal and whereas at the beginning the area was unknown and unused, it is now marked by a worn access which invites entry, has been used by campers on long weekends and bears the scars of trail bikes. In a perfect world one would look for flexibility in bureaucratic procedures that would enable property to be held in limbo to keep it inviolate if a lengthy delay were to be in prospect, but we do not live in a perfect world.

Despite these annoyances inventorying is underway and will continue over several years so that gradually, by making visits at different times from year to year, coverage of the whole property and the whole season can be obtained and the timing of events documented. Some of the work like identifying lichens and mosses or researching and writing up an account of geology, can be saved until winter which is useful for Interior and

Northern wardens when outdoor pursuits are not always inviting. With a certain amount of searching it is sometimes possible to find material useful for venturing into the complexities of obscure phenomena as plant galls, diseases of vegetation or the labyrinth of insect life. From time to time researchers advertise for insect species of groups on which they are doing work and may be willing to return the name of those submitted. So the extent to which a warden can go is limited only by their ingenuity and personal interest.

BUT it is not stretching reality to conclude that ERs are seen at the highest levels in Victoria as an aggravating legacy from the past rather than an active commitment to the future, especially as budgets, staff and willingness are insufficient to cover management of provincial parks let alone foster the

purposes of ERs. In recent years BC governments have seen contracting out of operational functions in parks as a means of easing management obligations and perhaps the time is right to consider whether ERs should be handled in a similar fashion. An independent body (or one associated with an academic entity) would be set up for this purpose and like other contractors it would earn agreed funds (sufficient for basic operational functions). A scientific panel would provide technical direction, and volunteer wardens would operate much as they always have though perhaps with more encouragement than they presently receive. Without doubt many able minds would be needed to develop such a proposal but at least it could lead to more caring patronage of ERs and help assure their original purposes. ■



ER#108 – *Cougar Canyon*

PHOTO COURTESY OF BC PROVINCIAL PARKS AND PROTECTED AREAS BRANCH

Scholarship Award Recipients and Ongoing Research Supported by the Friends of Ecological Reserves in 2003

by Lynne Milnes

The Friends of Ecological Reserves is very pleased to announce the following students as recipients of scholarships for their research in Ecological Reserves in 2003.

1. Erica Wheeler is completing her Masters thesis in the Department of Biology at the University of Victoria on the genetic diversity in BC of populations of the rare slim-leaf onion (*Allium amplexans*) and its biogeographic relationships to southern populations. Awarded \$2,000.
2. Wayne Hallstrom is completing his Masters at the University of Alberta on field studies of the effects of habitat loss, fragmentation and non-native species invasion on 5 species of butterflies in Garry oak meadows. Awarded \$1,700.
3. James Miskelly is completing the second year of his Masters thesis on the critical needs for the conservation of habitat for the recovery of endangered butterflies in Garry oak meadows. Awarded \$2,000. James gave a fascinating talk at the last FER AGM .
4. Emily Gonzales is completing her PhD at the University of British Columbia on research into the survival rate of various methods of management of Garry oak meadows. Awarded \$2,000.
5. Katie Christie is completing her Masters under Dr. Tom Reimchen at the University of Victoria on the salmon nitrogen found in songbird wings along salmon streams on the midcoast.
6. Dr. Jane Watson of Malaspina University College was awarded \$10,000 for her continued work with sea otter-sea urchin population dynamics.
7. Dr. Tom Reimchen of the University of Victoria was awarded \$10,000 for his continued work on the interaction of fish, forestry and bears on various biotic levels on the midcoast.

The Friends of Ecological Reserves would like to thank all of its generous supporters and donors who make it possible for these research awards to be granted. We honour the hard work done by these scientists in their never ending quest to help us understand the natural world around us and for their efforts to document the ecology of Ecological Reserves before they are changed forever. We encourage all of our members and their friends to continue to support biological research in Ecological Reserves throughout the province. Your contributions go directly to support research in BC. ■

May 9, 2003

Dear Friends,

I am writing to thank the Friends for your generous support of sea otter research in Checleset Bay Ecological Reserve. Support from the Friends each year has ensured that I am able to continue to monitor my permanent sites, (which are being used to follow long-term variability in community structure in areas with and without sea otters) as well as track the abundance of sea otters. As ecologists become increasingly aware of how variable ecological systems are, such "unglamorous" monitoring research becomes more and more valuable. The sea otter counts of course have been important in assessing the status of sea otters in BC, and were an important component of the sea otter recovery plan, that was written by the sea otter recovery team (under SARA) this year. Without support from the Friends, it is highly unlikely that I would have been able to continue this work, and such data would not have been available.

This summer I will continue to use the red turban snail as a model to investigate how prey species have adapted to predation by sea otters (work that I reported on to you last year). I look forward to sending you a report on this years work in the fall.

Sincerely, Jane Watson

2002 Vicky Husband Scholarship Recipients

Last year's Vicky Husband Scholarship was awarded late this year. The award format was extended to include two recipients instead of one in previous years. The scholarship is given annually to two students entering their third or fourth year of studies in the School of Environmental Studies at the University of Victoria. The recipients for 2002 were Rachelle Delaney and Glenys Verhilst. Rachelle is the Vicky Husband scholarship recipient for her second consecutive year. She is currently in her fourth year and is working towards a double major in Environmental Studies and Writing and hopes to use the skills that she is developing to write about and educate the public on environmental issues. Glenys volunteers locally with environmental groups and is grateful for the scholarship which will allow her the time to continue to volunteer to help preserve wilderness and to move towards a sustainable society.

The Friends of Ecological Reserves extends congratulations to both of the award recipients of 2002 and wishes them both the best in their upcoming year of studies. ■

Ecological Reserves of the Okanagan – PART I



ER 7 – Trout Creek

- Located 5 km SSW of Summerland, N of Trout Creek on south slopes of Mt. Conkle
- 75 ha
- Conserves representative semi-arid vegetation dominated by ponderosa pine and Douglas-fir. The red-listed Columbia goldenweed (*Pyromoma carthamoides* Hook. Var. *carthamoides* previously known as *Haplopappus carthamoides* [Hook.]A. Gray ssp. *Carthamoides*) is found here along with other interesting dryland plants. It is an important site in terms of reptile diversity. Two types of garter snake, western yellow-bellied racer, Rocky Mountain rubber boa, bull snake and Northern Pacific rattlesnake are all found here.
- Warden: Laurie Rockwell



ER 7 – Trout Creek

Laurie has been warden here for 10 years and visits the reserve once a month. There has been some fence cutting vandalism in the past but none observed in the last few years. He monitors the fence line, especially in fall during hunting season. Rapport with Parks on fence repairs when needed has been good. He keeps a log of flora and fauna and insects. Cindy Prescott from UBC is using the reserve to do plant litter research. Bio control of knapweed has proven incredibly effective – the knapweed is virtually gone. Toadflax control started last year but it is too early to assess its success. Toadflax is a problem for mariposa lilies. Malcolm Martin helped out with a plant survey last year: 2 red listed plants were found: Columbia Goldenweed and narrow leaved brickellia (*Brickellia oblongifolia* Nutt ssp. *oblongifolia*) which had not been reported before. Laurie believes it to be the furthest north in B.C. it's been found. It was flagged and photographed and should flower soon. The reserve is located beside a golf course. The golfers come in to retrieve balls so Parks put in a stile to prevent damage to the fence. He is monitoring a blue listed species, the gray flycatcher. The first sighting was in 1994 and he saw 7 recently.

ER 34 – Big White Mountain

- Located 42 km ESE of Kelowna
 - 951 ha
 - Purpose is to set aside representative Engelmann Spruce – Subalpine Fir and Alpine Tundra Zone ecosystems. Rare plants include Engelmann's sedge (*Carex engelmannii*), Elmer's Indian paintbrush (*Castilleja elmeri*), alpine Indian paintbrush (*C. rhexifolia*) and alpine wintergreen (*Gaultheria humifusa*).
 - Warden: Dieter Overhoff
- Big White* is an alpine bowl established (as an ecoreserve) in 1972 to protect subalpine and alpine plant communities. The bottom of the bowl is approx 6,000 ft. The 7,000 ft contour lines the border. The bottom land is a bit wet, full of beautiful big rocks, stunted trees (*Krummholz*) little ponds and watercourses and by the end of July beginning of August, a kaleidoscope of colour, when the wild flowers are blooming. A stiff hike in and swarms of mosquitoes ensure that the reserve is not disturbed. Also the walls surrounding the bowl on 3 sides are steep, so much so that in wintertime the skiers don't venture there. Also several meters of snow cover everything.

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ER 34 – Big White Mountain

PHOTO COURTESY OF BC PROVINCIAL PARKS AND PROTECTED AREAS BRANCH

and cattle out very effectively and I never did see any evidence of other people.

– Dieter Overhoff

ER 77 – Campbell-Browne (Kalamalka Lake)

- Located 5 km N of Oyama, W side Kalamalka Lake
- 107 ha
- Plant community includes ponderosa pine, grasses and moss, small amounts of Douglas-fir. Its outstanding feature is a rattlesnake winter den or hibernaculum.

■ Warden: Linda Kennedy

Linda says there's a need for some refencing and fencing repair. She is working with Parks to find some funding for this. Development is increasing hence the need for fencing. No current observation of the rattlesnake hibernaculum by researchers is taking place. It appears that some rocks at the den mouth have been displaced or moved. If anyone has photos of the previous

Continued on page 10

"ERs of the Okanagan" continued from page 8

During the summer months the reserve is visited several times by the hiking groups of the Central Okanagan Naturalist club, and over the years I have only met 2 or 3 other people. The views from the rim are outstanding but it can be very cold up there also. The botanists find many species of plants there, especially the Lance-leaved and leathery grape fern delight them.

– Dieter Overhoff



ER 51 – Browne Lake

PHOTO COURTESY OF BC PROVINCIAL PARKS AND PROTECTED AREAS BRANCH

ER 51 – Browne Lake

- Located 20 km ESE of Kelowna off McCulloch Forest Road.
- 124 ha
- Established in 1973 to conserve a typical Okanagan marsh and forest, rich in flowers including the mountain lady's-slipper (*Cypripedium montanum*) considered rare in the province.

■ Warden: Dieter Overhoff

A lot of years ago Beaver dammed a small creek, and created a shallow lake which grew in and became a wet meadow (marsh). In the forest surrounding the marsh and in the forested hills there is extensive beetle kill, a lot of blow

downs and more and more of the beetle killed trees are falling down, and it is hard to traverse or hike through. The reserve with the marsh surrounded by hills of pine, fir and cedar tree and, fine views from a south sloping bluff, is like an oasis among EXTENSIVE clear cuts. Every year, I bring a small group of botanists to the meadow, where they spend several hours, while I check out different areas of the reserve. All the downed trees keep other people



ER 77 – Campbell-Browne (Kalamalka Lake)

PHOTO COURTESY OF BC PROVINCIAL PARKS AND PROTECTED AREAS BRANCH



PHOTO COURTESY OF BC PROVINCIAL PARKS AND PROTECTED AREAS BRANCH

ER 108 – Cougar Canyon

arrangement at the den mouth, Linda would appreciate copies so she can check on this. Send to her at 8506 Aberdeen Road, Vernon, BC V1B 2J6

ER 108 – Cougar Canyon

- Located 13 km S of Vernon, E of Kalamalka Lake
- 550 ha
- Preserves representative Interior Douglas-Fir ecosystems together with a chain of small lakes and associated wetlands. The reserve is noted for including a variety of habitats from ponderosa pine-bunchgrass to redcedar-skunk cabbage types within a small area. Interesting reptile species found here include the northern alligator lizard, western blue racer, rattlesnake and painted turtle.

- Warden: Malcolm Martin
(See Report from Cougar Canyon on page 5 for Malcolm's update)

ER 130 – Mahoney Lake

- Located 6 km S of Okanagan Falls and 3 km W of Vaseux Lake
- 29.25 ha
- Conserves a southern interior saline lake with unique limnological features. Plant species along the lake include salt-tolerant wetland species. Little mixing occurs in the lake and its upper waters become stratified in spring and early summer.
- Warden: Eva Durance
The ER was fenced a couple of years ago, thanks in good part to the Nature Trust of BC whose land abuts the ER and who also were getting fed up with people driving in from the road. This has helped reduce the traffic in the ER and I think did impress upon some at least that this was not for general public use. Research there has been international for perhaps 30 years because of the unique purple sulphur bacteria

layer about 15 m. down: Dr. Tom Northcote is and has been foremost in that from the start I understand. The water's very low this year, as throughout the valley, and the fence down to the lake is now up on shore, so some mountain bikers have gone along the shore a few times into the marshy area at the north end, not a good thing! People still walk there and let their dogs run loose, but it doesn't seem to be too damaging, at least not on the surface; pity they wouldn't find somewhere other than a lake though! Weeds of course are a big concern; an inventory was done two years ago, the last year that the E-teams were available through the Ministry, but there's nobody and no money to follow up with controls or enhancement. As with most ERs I suspect, Mahoney's firmly parked in mid air! It's adjacent to the new White Lake Provincial Park too and we need more signs to indicate the boundaries of both, but the staff are so stretched that we've not been able to find a date to do this. Lots of needs, not much action; what's new with this government?!.

– Eva Durance ■



PHOTO COURTESY OF BC PROVINCIAL PARKS AND PROTECTED AREAS BRANCH

ER 130 – Mahoney Lake

The Ecological Reserves – a biased history in 10 minutes

by Lynne Milnes

In the 1970s a group of like-minded biologists inspired by Vladimir Krajina's vision of biogeoclimatic zones as repositories of unique genetic information, began the International Biological Program. The IBP program set out to protect representative ecosystems worldwide as gene banks, outdoor classrooms, and unique and representative habitats for flora and fauna. BC seemed the obvious choice to start with in Canada because of its diverse geography, low population and unusual presence, in the world context, of pristine wilderness.

In 1971, biologists chose approximately 50 sites in BC as Ecological Reserves and the Ecological Reserves Act was passed by Order in Council creating these first 50 reserves. By 1976 the Ecological Reserves Unit was operating with Bristol Foster and Jim Pojar on the 10th floor of Harbour Towers. By 1978 Jim Pojar left to go north and Hans Roemer took his place while Trudy Chatwin was added. So there were 3 bicycles at Harbour Towers and much running up and down the stairs.

Ecological Reserve proposals were overseen by a scientific advisory committee of business, government and biology types that met once a year at the AGM of Ecological Reserves held at UBC. At this time new proposals and newly established reserves were introduced. To establish a reserve it took several years of shuffling proposals past every resource agency hurdle such as parks, hydro, mines, forest service, fish and wildlife, water resources, BC Hydro, archaeological sites etc and everything was done by the 3 person unit to expedite this process. Rogers Chocolates, cute pictures of cuddly animals, whatever bribery it took – was

done to keep the ball rolling.

I was brought in in 1980 to replace Trudy and introduce a volunteer warden program province wide to look after the reserves. The volunteers were our eyes and ears in the regions. They were related to the fish and wildlife guy, their son-in law worked in the mines branch or somebody they knew could help us when we needed it and we needed help a lot.

By 1980 Ecological Reserve Proposals were becoming political. The Stein River Valley, the Khutzeymateen, South Moresby, the Tahshish, Meares Island, the Nimpkish River, Robson Bight, the Tsitika, Spruce Lake, the Valhallas, to name only a few of the areas that were embroiled in a new public input process which would later be rolled into LRMPs. Environmentalism was coming out of the closet and now the eyes of the world were on BC.

It was not unusual for the little Ecoreserves Unit to have a film crew from Japan, scientists from Italy, politicians from the USA visiting during the field season. This made the bureaucrats nervous. They had every right to be. We were very determined and fearless. When all else failed we called in Royalty and with the help of the students at Pearson College had Prince Philip's visit the reason for the passage of the Race Rocks Ecological Reserve #97. Vicky Husband and I personally went to Jacques Cousteau's office in Paris armed with photos of clearcuts on the Queen Charlotte Islands to get his endorsement of Haida Gwaii prior to Cousteau's BC visit during Expo 86. Can you believe it was Vander Zalm who saved South Moresby?

My time at Ecological Reserves was running out. There was an election in 1983 and the Social Credit govern-

ment got in again which did not bode well for the politically insensitive Ecological Reserves Unit. I was a young naive civil servant who believed all information should be available to the public. It did not take long before I realized I could be more effective outside the system. Before I quit, because I knew my job would never be replaced, a group of us started the Friends of Ecological Reserves. I had a colleague in Ottawa who fast tracked our application for non-profit status. Meanwhile my bureaucratic bosses in Victoria were trying to shut down the warden system. These regional volunteers were a very effective regional support group but the ER Unit was more and more muzzled by the bureaucratic process in Victoria.

Despite these set backs we persevered. The ER Unit had its own doorway into the press as Bristol's cousin was the editor of the Victoria daily newspaper. Don Vipond gave us editorial space when we needed it. The Friends was established in May of 1983 and we used our new non-profit status and media connections to raise money for research in Ecological Reserves because that same year the ER scientific advisory panel was dismissed by the newly elected government. Without having had the press on our side I am sure the Ecological Reserves Unit would have been disbanded then, too.

Twenty years later the Friends are still supporting scientific research and reaching out to volunteer wardens. Ecological Reserves are now amalgamated into Parks and Parks planners are coming to the Friends to get us to help them manage Parks but we have enough to do. The Friends puts out a newsletter 3 times a year for wardens and members. We support research by

continued on page 12

“...history in 10 minutes” continued from page 11 students in Reserves and often give the initial seed money necessary to get a project off the ground. We gave the first grant to Jane Watson now Dr. Jane Watson at Malaspina College studying sea otter – sea urchin population dynamics. Dr. Tom Reimchen and many of his students have benefited from our philanthropy and we have a scholarship for volunteerism in the Environmental Studies Faculty under Vicky Husband’s name, the largest scholarship in the whole department.

I know Adolf Ceska would like to re-establish the scientific advisory committee and Friends discussed this at our last board meeting. We have decided not to support this motion not because it isn’t a good idea but because we would prefer leaders from industry, government and science to come and sit on our board. We need all these different voices to guide us. So I would like to leave you with 10 things you

can do to help continue the program of Ecological Reserves started by Vladimir Krajina’s vision.

1. Become a member of the Friends.
2. Give a membership to someone who you think would like it, or someone who needs to be educated or someone who could help financially.
3. Volunteer time on a field trip, lead it, – make sure students come along.
4. Volunteer time on the board. I have been doing this since 1983 on a volunteer basis while working full time. I wouldn’t mind a year or two off.
5. Encourage others to sit on the board. We need new blood.
6. Write the government on behalf of Ecological Reserves – make a phone call.
7. Pass a newsletter or our website address to biologists in other countries, other provinces. It would be

nice to know how other ecological reserves are fairing.

8. Encourage people you know in the regions to become volunteer wardens. There are many reserves in the province without wardens which means no one is looking.
9. Help us organize an annual warden meeting. These gatherings are vital to volunteers in order to share ideas and promote change.
10. Make a contribution to the Friends. We do not have an office. We have a P/T masters student who volunteers many hours every week beyond the minimum wage we pay her for one day a month. Your money is not wasted. It will go directly to research and protecting BC’s pristine places as Vladimir Krajina would have liked it.

For more information please see www.ecoreserves.bc.ca ■

Throwing Out the Baby but Keeping the Bathwater: An introduction to Bill 55

by Lynne Milnes

In May of 2003, the provincial government passed the first reading on Bill 55 the Water, Land and Air Protection Statutes Amendment Act that affects Ecological Reserves and Parks in a profound manner. We recommend all readers and community stakeholders become informed about this controversial Bill and inform their MLA and the Premier what they think. In a nutshell here are a few items contained in Bill 55.

1. **Satellite Channel Ecological Reserve** – all boundaries of the Satellite Channel ER #67 between Saltspring Island and Vancouver Island are changed to make way for a gas pipeline that has not been approved. The pipeline will be laid

in BC’s most seismically sensitive area to burn gas in a local community that does not want it.

2. **Pine Le Moray Park west of Chetwynd** – amends the description to except an existing railroad right of way and to except a future pipeline right of way.
3. **Tunkwa Park near Kamloops** – revises the description to except an existing and a future pipeline right of way.
4. **Spatsizi Wilderness Plateau Park in northwest BC** – 989 acres to be removed from the park and corrects an error in the legal description excepting mineral claims.
5. **Inkaneep Park near Oliver** – amends the description to remove

lands from the park for bridge realignment.

6. **Rubyrock Lake Park near Burns Lake** – excepts existing access roads to an Indian Reserve.

For more information please check out the parks website at: www.gov.bc.ca/bcparks/ and from there you can search for the relevant park or piece of legislation.

Write the premier at: The Parliament Buildings, Victoria, B.C. V8V 1X4 or call 387-1715, or The Minister of Water, Land and Air Protection at 387-1187 ■

TRIAL ISLAND 2003

A small group of Friends headed over to Trial Island for our annual field trip to ER #132 during the wildflower bloom. It was April 26 and it was the peak of the wildflower bloom. The blue fields of camas were blooming proof that we have had a warm spring. We were also greeted by old friends, like shooting star (*Dodocatheon pulchellum*), paintbrush (*Castilleja levesecta*), chocolate lily, (*Fritillaria lanceolata*), lomatiums and Bear's foot sanicula (*Sanicula arctipoides*).

Transportation to and from Trial Island was thanks to Marilyn and Phil Lambert as well Don Mais and Bruce Whittington without whose help and boatpower the trip would not be possible. Thanks also to our guides for the day, Oluna and Adolf Ceska.

Oluna and Adolf were able to point out interesting populations of Macoun's meadowfoam (*Lymnathes macounii*) and popcorn plant (*Plagiobotrys tenellus*), as well as identify all the wildflowers that make Trial Island so delightful in the spring. And as usual Adolf and Oluna had interesting stories to tell about the plants, making understanding botany a delight. At the end of the trip Oluna was especially excited about a beautiful population of *Sphaerocarpos texanus* (see photo or Scholefield's Field Guide to the Liverwort Genera of Pacific North America).

The lightkeeper kindly showed those who were interested the operational side of Trial Island. "Everyone is so respectful of the Reserve and aware of the privilege of visiting the Island," said Peggy Frank. "No one left without an understanding of the importance of these protected wild places".

Thanks to everyone who participated in this year's field trip. See you next year. ■



Sphaerocarpos texanus (tiny pouches to right of ant)

PHOTO BY WAYNE MILES

April 28/03

Dear Peggy and Friends:

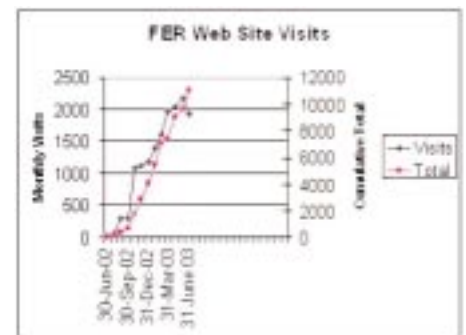
Many thanks for the invitation to visit Trial Island with you on Saturday. Jen and I certainly found it extremely interesting. Many thanks for accommodating my schedule.

Christopher Causton

Mr. Causton, Mayor of Oak Bay Municipality, joined this year's field trip with the Friends to Trial Island.

www.ecoreserves.bc.ca

The website has been up and running for a whole year! We continue to receive hundreds of visitors each month from around the world. It is a great way to stay up to date with BC's ecological reserves!



■



September

Ecological Reserve Warden Meeting – The Gathering

September 5, 6 & 7, 2003

Henry Grube Education Centre, Kamloops

Look for the registration form on Page 3 of this issue.

Registration deadline is

August 8, 2003



Great Canadian Shoreline Cleanup

September 13 to 21

The Friends will once more be taking part in this yearly hands-on conservation initiative to clean up Canada's river, stream, lake and ocean shorelines. To find out how

to get involved call Peggy Frank

at 519-0040 or e-mail ecoreserves@hotmail.com.

Website: <http://www.vanaqua.org/cleanup>



World Forestry Congress: Forests, Source of Life

Sunday, September 21 to Sunday September 28

Quebec City, Quebec

Theme: Forging a balanced approach to sustainable forest management

E-mail: sec-gen@wfc2003.org

Website: <http://www.wfc2003.org/>



World Wolf Congress 2003 – Bridging Science and Community

Celebrating wolves and sharing scientific and community approaches to wolf conservation

September 25 to September 28

The Banff Centre, Banff, Alberta

E-mail: info@graywolf.ca

Website: <http://www.worldwolfcongress.ca/>

October

Canadian Parks and Wilderness (CPAWS)

National Meetings

Thursday, October 30 to Sunday, November 2
in Vancouver

E-mail: info@cpaws.org

Website: <http://www.cpaws.org>

November

Banff Mountain Summit 2003 –

Mountains as Water Towers

Theme: Mountains as storehouses of fresh water including sessions on watershed management, ownership and profit, mountain water ecosystems, climate change and solutions

Sunday, November 23 to Wednesday, November 26

Banff Centre, Banff, Alberta

Website: <http://www.banffcentre.ca/mountainculture/festivals/summit/>



Visit www.ecoreserves.bc.ca

FRIENDS OF ECOLOGICAL RESERVES MEMBERSHIP FORM

Box 8477 Stn Central Victoria BC V8W 3S1

Renewal for 2003 New membership

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 Contributing articles/photos to *The LOG*
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Websites of Interest

Wildflowers of the Southern Interior:

Joan Burbridge's *Wildflowers of the Southern Interior of British Columbia and adjacent parts of Washington, Idaho and Montana* was published in 1989. Now that this useful handbook is out of print, the author has given permission to Living Landscapes, a joint project of the Royal B.C. Museum and Okanagan University College, to republish the guide electronically. It is illustrated by some 300 colour photographs accompanied by succinct descriptions covering habitat, names, traits, and notable features. Conduct a search using any or all of a number of criteria such as flower colour, leaf shape, habitat, and common and Latin names or use the browser to go through the species alphabetically. Included on the site are a glossary of plant terms, diagrams of flower parts and links to other plant resources for the area.
<http://royal.okanagan.bc.ca/projects/wildf/about.html>

Tree of the Month: If trees are your passion, you'll want to have a look at this attractive website. Put together by the College of Forestry at Oregon State University, the site has so far covered quaking aspen, giant sequoia, Pacific madrone (known in Canada as arbutus) bigleaf maple, Pacific dogwood and ponderosa pine. A series of pages is devoted to each species detailing distribution, reproduction, and physical traits of bark, leaves,

flowers, fruits and seeds. Scattered throughout are lofty quotations from the likes of Emerson and Thoreau. The stunning photographs include close-ups of details like leaf edges or bark and long range shots of either individual specimens or resplendent hillsides. Backgrounds to the pages, while apropos to the subject, are distracting and make the text difficult to read but that is a small quibble – well worth a look.

<http://www.cof.orst.edu/cof/fr/outreach/treeomth/>


The Tree Book: Closer to home, this publication by B.C.'s Ministry of Forestry has been out for a few years now. A second edition was published in 2001 and is accessible online or can be downloaded in PDF format. There are photographs of trees, text descriptions, line illustrations of associated animals and birds and most usefully for identification at a distance, silhouettes of the different tree species. Interesting facts are noted including First Nations uses and modern use of timber species.
<http://www.for.gov.bc.ca/hfd/library/documents/treebook/index.htm>

West Nile Virus: As hard as we all try to not be too alarmist about the West Nile Virus, few of us can claim not to harbour a niggling worry. An article on the subject in the latest News and Views section of the U.S. National Wildlife Federation website

does not so much quiet those fears as moderate them, advocating a sensible approach to the problem and warning against turning in panic to wholesale insecticide programs and draining of wetlands. It explores the causes, risk factors and suggests a few simple personal/local precautions that are available to anyone.

<http://www.nwf.org/nwfwebadmin/binaryVault/westnilevirus.pdf> ■

The Log



Friends of Ecological Reserves
PO Box 8477 Stn Central
Victoria BC V8W 3S1
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website: www.ecoreserves.bc.ca
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