

Wardens' Baseline Information to Receive Website Prominence

The Friends of Ecological Reserves is excited to announce a new initiative to enable volunteer wardens, educators, researchers and others with interest in Ecological Reserves to submit their field notes, annual reports and images for inclusion on a web page devoted to each reserve.

Please refer to the directions on page 2 of this Log to upload your information, pictures and/or videos. You do not need to know how to build a web page – we will do that for you – all we need are your submissions. If you already run a website which profiles an Ecological Reserve, then an index page will be produced to link to your web pages.

We will also be adding a link on the contents page developed for each Ecological Reserve to the **Panoramio** website (<http://www.panoramio.com>) which will take you directly to images of any reserve that have already been submitted. For example, if you perform a search on the Panoramio home page for either 'Race Rocks' or 'Comox Lake' you will see some of the images already installed. Pictures from both of these reserves have now been accepted for inclusion on Google Earth. Note that these pictures also have links back to various parts of the websites.

If you have photos from any Ecological Reserve that you wish to publish on Google Earth, just register on the Panoramio site and follow the directions. If you need further help please contact Garry Fletcher at: gffletcher@pearsoncollege.ca.

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Visit our website at:
www.ecoreserves.bc.ca



The Log

Autumn 2007

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 Winter issue of *The LOG* is November 15, 2007.

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Initiatives to Further FER Strategic Plan Goal

This edition of *The Log* contains four articles that address the Friends of Ecological Reserves Strategic Plan Goal # 3 which is "to support the development of a resilient and enduring science-based ecological reserve system." Two objectives to attain this goal are:

1. gaps and limitations of the current ecological reserve system are identified and understood; and
2. the ecological reserve system is an integral part of the province's biodiversity strategy. (See the Autumn 2006 edition of *The Log* for more information on our Strategic Plan.)

The first of these articles, (see page 3) concerns a new proposed ER at Fort Graham Portage.

The second article is the FER submission to the provincial government on changes to the *Wildlife Act* (see page 6). The third article is a proposal by FER for a Chief Biologist for B.C. The benefit of this would be a predictable process that enable us to provide input on the benefits of establishing new ERs (see pages 11 & 12).

The last article is a summary of the report entitled "Sustainable Forestry Benchmarks" which will be appearing on the FORREX website (www.forrex.org). See pages 12 & 13.

"Wardens' Baseline Information".....continued from page 1

Directions for Sending Your Information

1. Select the "Notes from Field Wardens" choice from the homepage of the FER website (www.ecoreserves.bc.ca).
2. Under the "Field Notes" section you will find the link to: ecoreserves@hotmail.com. This selection will enable you to email us.
3. Indicate on the subject line of the email to forward to the webmaster, Alison Nicholson. Attach your documents to this email and send it along to us. Your pictures should not be over 1 megabyte in size. If you can't compress them, please send them individually.
4. If you would like to attach a video to your email, please let us know and we will contact you on whether it is possible to include.

The Friends of Ecological Reserves website now features two ERs that have dedicated web pages. The first one is Race Rocks, ER #97 which links to already established websites relating to Race Rocks. The second ER is Comox Lakes Bluffs, ER #136 which provides references to resources and photographs.

Please check our website often as we begin to create more web pages dedicated to each Ecological Reserve!

Proposed Fort Graham Portage Ecological Reserve

By Mike Fenger and Mary Rannie

Background

A field visit to this potentially new Ecological Reserve at the Fort Graham Portage was mandated through a recommendation made previously to the Regional Manager by the team that reviewed the boundaries of Gladys Lake Ecological Reserve (2005). In addition to recommending new boundaries which reduced the size of Gladys Lake ER, the field team recommended another visit to the mineral lick. Only through the Collingwoods' knowledge of wildlife use was this lick included in the previous field visit.

A field visit was scheduled in 2006 but was postponed when FER were not able to attend. We are grateful for Parks inclusion and thankful for our ability to participate this year when Mary Rannie, a member of the FER board, represented FER on this field trip.

Mary Rannie's Field Observations

The team was flown by helicopter from Tatogga Lake Resort on the Stewart-Cassiar highway east to a gravel bar on Cullivan Creek in Spatsizi Wilderness Parks. Cullivan Creek drains northward into the Stikine River and is several kilometers northwest of the Gladys Lake ER. We climbed for a few minutes through spruce



Mary Rannie, Reg Collingwood and Janice Joseph at the Fort Graham Portage mineral lick. Photo courtesy of Len Vanderstarr

forest on a horse trail used by the Collingwoods. At the top of a ridge we left the trail, descending a grassy slope to the mineral lick which was part of a distinctive sandstone/limestone bluff. We examined the 100 meter long lick, much of which was an overhang which had smoothly eroded contours. We found sheep and goat hair on nearby twigs, as well as rubbing and bedding sites. We also found a form of scat (clay-like 'rocks') indicating that sheep were licking and eating the sandy silt. There were trails leading down to the creek below. After looking at the site on the ground, we flew south following two distinct game

trails along the mineral lick creek's canyon. They were clearly visible for 3-5 kilometers until the canyon ended. Sheep and goats appear to use this escape terrain above the unnamed creek to access the lick which is located between the 3300 to 3700 foot elevation range, well below timberline, and 3 to 5 kilometers from the nearby mountains. Inclusion of this escape terrain within a proposed ER appears logical.

The horse trail is located at the top of the slope immediately above the mineral lick. The proposed ER boundary would be to the south of this trail. The proposed ER would

Continued on page 5

Special Award for 20 Years of Service

By Bruce Petch, B.C. Parks Area Supervisor

Eric McAlary was the volunteer warden for Tranquille Ecological Reserve for 20 years, from 1986 to 2006. I worked with Eric for the last 3 of those 20 years. Together we developed a simple but effective working relationship.

During the winter Eric would draft a "management plan" (about 1/2 page long) listing the tasks he suggested be done in the coming year. This included things like fence repairs, sign replacement, plant inventory and perhaps ideas for small research projects. He would also specify what sort of help he needed from me. We would discuss the plan and

come up with a final version.

During the course of the field season, Eric would send me brief email reports when he visited the reserve. I accompanied him occasionally, and also let him know about anything going on that might affect the reserve. At the end of the season Eric would prepare a brief summary report on what had been done. Eric felt like he was part of the team, and I was very pleased to have a competent and committed person taking care of one of the many parks that I was responsible for. Thanks, Eric, for a job well done!

Bruce Petch
Area Supervisor



A special presentation was made to Eric McAlary (left) by Bruce Petch for the 20 years of service he provided to BC Parks as an ER Warden for Tranquille Ecological Reserve

CALENDAR

Field Trip to Race Rocks Ecological Reserve

Sunday, October 14, 2007
From 10:00 am to 1:00 pm

We will meet at Pearson College dock at 10:00 am.

Fee: FER members, \$15.00,
Non-members \$30.00
Seniors/Students \$25.00
(Fee includes a one-year
membership to FER)
Contact: Mary Rannie at (250)
478-8936 to reserve your spot.

Saturday, October 20 **7:00 pm - midnight** **Habitat Acquisition Trust** **Benefit Concert – Mad** **Hatter's Social**

Annual Musical Extravaganza
White Eagle Hall - James Bay.
Raffle, Door Prizes, Cash Bar,
Great Talent. Tickets & info:
995-2428

Monday, October 29 –
Marine Night – 7:30 pm
Room 159, Fraser Bldg.,
University of Victoria
Sponsored by the Victoria
Natural History Society. Dr.
Kim Juniper will describe the
unusual hot vent habitats and
biological communities on
underwater volcanoes
associated with arc volcanism
in the western and southern
Pacific Ocean.

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include the lick and the escape terrain to the south, essentially a long feature with the boundary defined by the mineral lick and escape terrain. Once the wild mountain ungulates leave the escape terrain for higher alpine areas the trails are no longer distinct. It was concluded that the sheep and goats dispersed through the forest to alpine habitat.

Discussion

As a member of the field team, FER sensed there was agreement on the values within this area as suited to ER status and a willingness of the other team members to support a change from Park to ER in an area limited to the feature.

The field visit was specific to confirming the values of this feature and based on our field observations this area is consistent with section e) of the *Ecological Reserves Act* (see URL http://www.qp.gov.bc.ca/statreg/list_statreg_e.htm) which states:

(e) areas that contain unique and rare examples of botanical, zoological or geological phenomena.

It may also be possible that the plants in the area may fit under Section f) which states: (d) areas where rare or endangered native plants and animals in their natural habitat may be preserved;

A vegetation inventory would be needed to confirm the presence or absence of rare native plants.

Based on section e) of the *Ecological Reserves Act*, FER

concludes that the Fort Graham Portage does fit the criteria and does warrant ER designation.

Inclusion of this mineral lick and escape terrain also supports the purpose for which Gladys Lake ER was established which is:

"Gladys Lake Ecological Reserve was established to provide an alpine-subalpine study area containing unharvested large mammal populations, and to protect Spruce-Willow-Birch and Alpine Tundra ecosystems" (See URL http://www.env.gov.bc.ca/bcparks/eco_reserve/gladys_er.html#purpose)

Recommendations

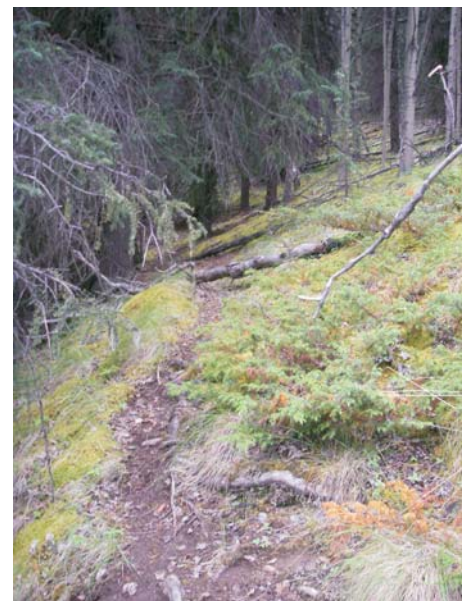
1. That a new Ecological Reserve named Fort Graham Portage be established for the purposes of protecting a unique and rare geological and zoological feature used by a wildlife mountain ungulate as a mineral lick.
2. That the feature and the escape terrain in the Spruce Willow Birch Biogeoclimatic zone be bounded by the horse trail to the north and the escape terrain that is at the break of slope for a few kilometers above the unnamed creek flowing into Cullivan Creek to the south.
3. That the size of the ER is determined through GPS or some other suitably accurate means to define boundaries. It is estimated that the size would be approximately 250 ha.
4. That soil samples for the

mineral lick be taken and analyzed and that vegetation is inventoried using standard Vegetation Resources Inventory as part of the baseline for this new ER.

5. That ER monitoring include provisions for recording observations of wildlife use of this ER, and over time, the tracking of species that use this mineral lick to establish their home range size and the importance of this site within the larger landscape context be undertaken.
6. That this new ER be established within the next two years and no later than January 2010.

Acknowledgements

Thanks to MOE staff Janice Joseph and Len Vanderstar for logistics that made this field trip a reality. Thanks to Jim Reed, helicopter pilot, for the safe passage and thanks to the Collingwoods for taking part and putting this forward. Thanks to Mary Rannie for attending on behalf of FER.



Submission by FER to Ministry of Environment on Wildlife Act Revisions

By Mike Fenger, President, FER

To: Wildlife Act Review Project
Fish and Wildlife Branch
BC Ministry of Environment

Re: Friends of Ecological
Reserves Submission on Wildlife
Act Revisions

Thank you for this opportunity for input to the 25-year-old *Wildlife Act*. Much has changed in our understanding of the environment and how to manage wildlife and habitat sustainably since this act was drafted in the early 1980s. We welcome the opportunity to provide advice.

Friends of Ecological Reserves (FER) are a non-profit volunteer organization with a 30-year record of partnership with Ministry of Environment. We are the extra eyes and ears for Ministry of Environment staff to help protect and manage the 147 Ecological Reserves in BC. Our experiences with ecological reserves have made us aware of the challenge of sustaining wildlife and the management challenges faced by ministry staff.

Our comments regarding the *Wildlife Act* focus on three topics: (1) the definition of wildlife, (2) the need for a chief biologist, and (3) the need for greater cooperation and integration among government agencies regarding the management of our ecological footprint.

Definition of Wildlife

We support the expansion of the definition of wildlife set out in the discussion paper *The Wildlife Act: Managing For*

Sustainability in The 21st Century to include fish, plants, invertebrates and all the living organisms in British Columbia. This is a more inclusive and appropriate definition of wildlife.

A Chief Biologists for BC

FER recommends that the province establish a Chief Biologist position with statutory authority for conservation and consumption targets.

A Chief Biologist enabled in legislation means he/she would be responsible and accountable on a periodic basis to: 1) set hunting and fishing limits into regulation; and 2) to set conservation objectives for species and ecosystems at risk. The legislation would guide the Chief Biologists on factors they must consider when setting numeric quotas.

The benefits of a Chief Biologist are:

- More systematic, planned activities to supply the required information to the Chief Biologist on a regular basis;
 - Better organization of inventory and research data and identification of gaps in information;
 - More explicit data analysis and clarification of assumptions supporting forecasts on wildlife;
 - Provision of a rationale supporting wildlife decisions; and
 - Greater transparency and opportunity for input by stakeholders including First Nations, non government organization and the public.
- A Chief Biologist within the Ministry will increase the effec-

tiveness, efficiency and transparency of wildlife decisions. There would be less desire for those dissatisfied to go to the Minister to ask that their concerns be addressed as they will have a strategic and managed decision making process within which to make their concerns and information known. There will be meaningful and better opportunity to participate.

Chief Biologist legislation could be modeled after the Chief Forester legislation in the *Ministry of Forests Act* (section 2) and in the *Forest Act* (section 8) that provide the statutory authority for periodic allowable annual cut determinations. The factors and timing of decisions that the Chief Biologist would need to consider may be factors such as: historic distribution of species, current status, expected trends for population estimates, recovery groups' advice to government and social direction from government.

Like the Chief Forester, a Chief Biologists would need to be supported by analytical staff and a specific analysis process. The Timber Supply Process is well laid out on an area by area basis with a new allowable annual cut determination required every five years. There is a period of data package assembly and review, followed by a period of analysis and a report detailing the assumptions and analysis and a set period of review on the forecast of the numeric harvest that may be permitted and finally there is the

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Thompson Area Ecological Reserve Wardens' Meeting

By Karen Willies, Skihist Ecological Reserve Warden

Volunteer Wardens for six Ecological Reserves in the Thompson Region recently met with Parks personnel. These wardens were Gwendy Lamond, Soap Lake; Frances Vyse, Skwaha Lake; Karen McLaren, McQueen Creek; Audrey & Nils Hoeg, Chasm; Karen Willies, Skihist and Eric McAlary, the retiring warden, as well as the new wardens Bob & Wilma Scheer for Tranquille. Chaired by Earl Sinclair, Section Head, Protected Areas, this meeting gave the wardens a chance to meet new Parks personnel and Rangers with whom they would be dealing. Ecological Reserve Warden Handbooks were passed out and liaison procedures, data gathering and reporting methods were discussed. Also mentioned was the advantage and feasibility of establishing a digitalized boundary (GPS) of each reserve.

Earl Sinclair gave a "Parks for People" presentation, an overview of the direction BC Parks will be taking. Studies have shown that historical visitor use of parks has diminished in the last few years, as demographics have changed and parks must change to meet the new needs. BC Parks has established a goal of a 20% increase in park use by 2010 using the baseline of 2004 attendance.

After lunch Donna Romain and Jesse Jones gave an



L to R: Jesse Jones Sr., Ranger; Karen McLaren, McQueen Creek Warden; Frances Vyse, Skwaha Lake Warden; Gwendy Lamont, Soap Lake Warden; Audrey & Nils Hoeg, Chasm Wardens; Karen Willies, Skihist Warden; Wilma & Bob Scheer, Tranquille (new Wardens); Eric McAlary, Tranquille (retired Warden); Tod Haughton, Area Supervisor, Kamloops, Earl Sinclair Section Head, Protected Areas; & Alistair McCrone, Senior Ranger

overview on their vegetation survey techniques, which are used to identify areas in Parks with high noxious weed density. An Inventory and Monitoring Guide was passed out in order for wardens to record any weed outbreak that they might come across on their reserves.

Earl Sinclair provided the status of Mountain Pine Beetle on reserves and how we were to go to manage for these changes. In keeping with the true purpose of Ecological Reserves, that they be used as bench marks, the devastation from the Mountain Pine Beetle would be left to run its natural

course and used as a learning tool.

The important role of wardens was stressed, particularly in the current climate where increased protected areas, plus increased responsibilities have not resulted in corresponding increased personnel or funding. Thus wardens can help with diligent monitoring of their reserve.

A special presentation was made to Eric McAlary by Bruce Petch for the 20 years of service he provided to BC Parks as an Ecological Reserve Warden for Tranquille Ecological Reserve just outside of Kamloops.

Continued Support of Sea Otter Research in BC

By Jane Watson

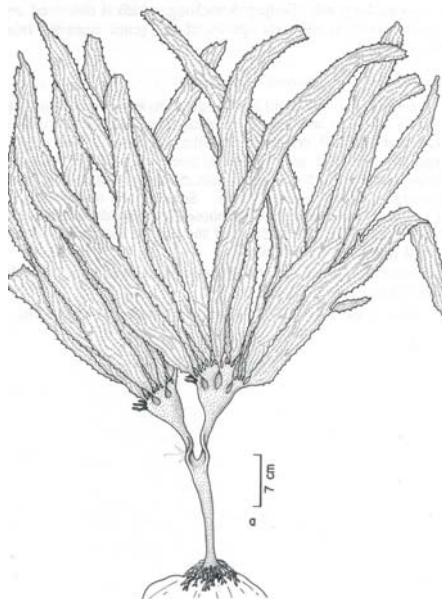
Dear Friends,

I would like to thank-you for your continued support of sea otter research in British Columbia.

As many of you will know at the May meeting of COSEWIC (Committee on the Status of Endangered Wildlife in Canada) sea otters were down-listed from Threatened to Special Concern, a category that means the species is not in imminent danger, but remains at risk. The main risks identified by COSEWIC were the relatively small geographic range and size of the otter populations (<3500) and their susceptibility to oil. In particular, the proximity to BC sea otters to major oil tanker routes was identified as making them especially vulnerable to oil spills.

I have already started my summer's field work, having just returned from a trip to the central coast, where as guests of the Underwater Harvesters Association (UHA) we conducted diving surveys of areas with and without sea otters between Hakai Pass and Evinrude Inlet. The UHA represents the geoduc and horse clam license holders of BC so this may seem an unlikely alliance, given that sea otters compete directly with license holders for clams. However, with a representative on the Sea Otter Recovery Team, the UHA has repeatedly offered (over many years) to help with sea otter research. This year I accepted their offer.

Using funds from the Friends, we traveled to the central coast where we met up with the Stan Hutchings and Karen Hansen who own the Hawk Bay a vessel chartered by the UHA to sample



Dictyoneuropsis reticulata = *Dictyoneurum californicum*
(From UC Berkely Herbarium web page
<http://ucjeps.berkeley.edu/guide/brown23.html>)

for PSP. Using the Hawk Bay as a "platform of opportunity" we sampled a total of 20 sites in areas with and without sea otters. We were particularly interested in the size and abundance of the red turban snail, but also took the opportunity to describe the community structure in areas with and without otters. Although I have not yet analyzed the data we collected we did make some interesting observations.

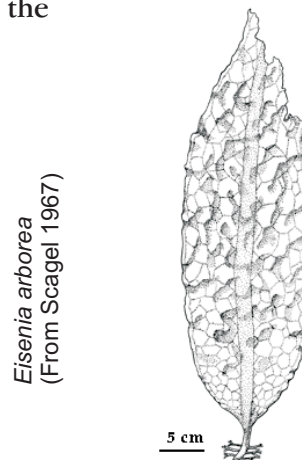
Perhaps most surprising finding was discovering a kelp called *Dictyoneuropsis reticulata* (= *Dictyoneurum californicum* see picture) in the Gosling Rocks (part of the Hakai Luxvbalis Conservancy Area).

Dictyoneuropsis is common in California and was known to occasionally occur as far north as Hope Island. This kelp was not in the Goslings when I dove there in 1991 and was first reported in the area in 1994. In 2007 it was amongst the most abundant kelp, reaching densities of ~40 plants /

m². In addition, the stalked kelp *Eisenia arborea*, another species which is considered to be more southern has also increased in abundance. It was absent at the sites I dove at in 1991 but made up about 20% of the stalked kelps we counted on this trip.

Although we did not conduct a formal census of sea otters, we visited the main areas that sea otters are known to raft in. Our counts are crude and without conducting a proper survey it is hard to estimate how many sea otters were in the area, but over a 3 day period we counted at least 600 sea otters between the Gosling Rocks and Cape Mark. The last complete count of otters on the central coast was in 2001, when 507 sea otters were seen in the same area.

Once again I would like to thank the Friends for their support. Long-term ecological studies, which rarely produce immediate results, are not easy to find funding for and this type of research could not have been conducted without the financial support and encouragement the Friends have provided. I look forward to reporting on the upcoming summer's work later in the



Eisenia arborea
(From Scagel 1967)



Sandstone formations being used by mountain goats and Stone sheep for shelter – Fort Graham Portage (photo courtesy of Len Vanderstar)

“Submission to MOE”continued from page 6

Chief’s report with a supporting rationale on how the factors were weighed in the determination. Lastly the Chief’s rationale can instruct on future need for inventory and research to improve accuracy of the next determination.

Work scheduling and budget allocations would be easier to forecast and gaps in information could be identified before the next determination decision.

Managing our Ecological Footprint - Relationship of the Ministry of Environment and Chief Biologist to other Resources Development Agencies

The Ministry of Environment cannot sustain wildlife without integration and stronger ties to the ministries that manage ecosystems. Wildlife is part of an ecosystem and managing wildlife in isolation from those developing and changing ecosystems cannot achieve sustainability.

The Ministry of Forests has the responsibility for habitat in BC. The Ministry of Agriculture and Lands has the responsibility for

strategic land use planning and other agencies, such as Mines, Oil and Gas, for development.

A Chief Biologist can inform a sustainable coordinating agency that addresses cumulative effects on the land base. However, such an agency is not well formed in government. Each agency acts principally within its own mandate “silo” and the cumulative effects of development and carrying capacity, environmental thresholds and risk within a fixed geographic have a poor forum.

Changes are needed in the structure and accountability within government to manage our ecological footprint and sustain wildlife. An improved *Wildlife Act* with a Chief Biologists cannot achieve sustainability of wildlife without some-cross ministry integrating authority.

On behalf the Board of Directors of Friends of Ecological Reserves thank you for the opportunity to provide advice on how to make improvements to the *Wildlife Act*.

Please see related article “A Chief Biologist for BC” on page 11

Safety Management & Accident Prevention Program

The Ministry of Environment’s Safety Management and Accident Prevention Program (SMAPP) includes regulations affecting officially constituted volunteers, i.e., those who have signed Volunteer Agreement forms. This includes all ER wardens. This section covers the status of such volunteers. It should be read carefully by all wardens to avoid any misunderstandings about rights and responsibilities in the event of injuries or other untoward events while carrying out volunteer duties.

From the SMAPP manual, Section 4, page 9 ‘Volunteers’. As of 17 July 2007

Volunteers who perform work or services for the Ministry are not normally covered by the WCB for wage loss or medical benefits because they are not workers. Volunteers can sue the Ministry/its workers and other volunteers for injuries sustained while working as a volunteer. Risk Management Branch provides insurance that covers injuries to volunteer workers and insurance for their actions in the event of a third party claim. This insurance doesn’t stop a volunteer or their family from suing for additional damages.

For projects carried out by volunteers under the direct supervision or direction of Ministry employees, the Ministry will have owner’s responsibilities in regards to safety and first aid for volunteers. The Ministry will be required to ensure that: volunteers performing a task or operating equipment are qualified to do so; first aid requirements are up to standard; the volunteers adhere to the standards set out in the WCA, OHSR, and the Ministry’s SMAP Program; where more than one volunteer group is working that there is coordination of health and safety activities as per prime contractor responsibilities; the volunteers are informed about hazards inherent to the operations of the Ministry, generally and locally; and a safe and healthy workplace/environment is maintained.

Note: A contravention of the WCA or OHSR by a volunteer at a Ministry project is considered to be a contravention by the Ministry.

Okanagan ER Wardens Participate in Training Session

By Eva Durance, Warden, Mahoney Lake

May 28 and 29, five wardens from the Okanagan Region of BC Parks attended part of the Region's auxiliary ranger training sessions at the invitation of Parks staff. The training was held at Manning Park Lodge, a location that not only allowed for a park experience, but also was most conducive to people getting to know each other better in a social as well as a work environment.

This invitation arose from the expressed wish of a number of wardens at our Regional meeting in March for opportunities to learn new skills and knowledge that would be useful in their volunteer work for the ERs. Parks staff organized the sessions so that the topics most likely to be of interest to wardens were consecutive, on Monday afternoon and all day Tuesday. The topics covered were invasive weeds and various control methods Parks uses, pine-beetle biology 101, the Safety Management and Prevention of Accidents Program (SMAPP) one section of which deals specifically with volunteers and their status regarding insurance coverage, and grassland ecology and grass identification. The information on volunteers and SMAPP will be made available to wardens online as soon as possible and may be printed in The Log in a future issue.

All wardens attending found the sessions very informative and likely to be useful in their work. Since all but one warden had been in the program two



years or less and two had just signed up, the chance to meet Parks staff and learn about their duties and responsibilities was very valuable. The social evening and mealtimes also provided lots of chances for the wardens to get to know full-time staff and auxiliary rangers.

The Parks office generously covered accommodation and meal costs for us, and the travel costs were covered by some of the funds remaining from the Regional meeting expense claims.

I urge other Regions and their volunteer wardens to consider a similar sort of training opportunity. We are planning for a repeat in this Region next year and are looking for ideas on topics of interest to more senior wardens and with relevance to monitoring, studies, and research in the ERs.

Good Start for New Warden

By Kathryn McCourt, Warden, Mahoney Lake

As a beginning ER warden, I found the presentations by Senior Rangers about the number and nature of parks, ecological reserves and protected areas in their respective divisions excellent background material. It was also interesting to learn that their work is focused primarily on human users of parks rather than the other species residing there.

As a naturalist and gardener, I enjoyed the presentations on western and mountain pine beetles and invasive plants. The ecological history of grasslands was fascinating, and is information that all residents of this fragile ecosystem should have. I feel privileged to have shared these sessions with parks staff and look forward to working with them in a joint effort to preserve and protect natural areas.

A Chief Biologist for B.C.?

By Mike Fenger

In addition to the formal submission to MOE on changes to the Wildlife Act, there is a benefit from a wide public discussion on the concept of a Chief Biologist. This article is based on the FER submission (see page 6) but is intended to stimulate wider debate on this issue.

British Columbians, especially those working in forestry, are familiar with the Chief Foresters' statutory authority and the Timber Supply Review (TSR) process used to determine allowable annual cut (AAC). Could the Chief Forester model be successfully adapted for conservation and harvest decisions for fish, wildlife and species and ecosystems at risk? This article entertains the concept of a Chief Biologist, how this may work and what benefits this may bring to British Columbians. After twenty-five years, the *Wildlife Act* is being revised – is this the time to introduce in legislation a Chief Biologist? We would like to generate debate within the forestry profession on the benefits that the forest professional may receive if there were a provincial Chief Biologist.

A Chief Biologist would be enabled in legislation and responsible and accountable to periodically set within defined geographic areas:

- 1) Hunting and fishing limits (in regulation) and
- 2) Conservation objectives for species and ecosystems at risk.

To understand how a Chief Biologist could work, let's first review the Chief Forester's authority and mandated function. The Chief Forester is guided by legislation (section 8 of the *Forest Act*) to consider factors such as inventory, growth and yield, and natural disturbances and to account in the AAC decision for uncertainty in these factors. This has led to the timber supply review (TSR) process which uses best available information to analyze and support the AAC decision. The TSR process is completed periodically (at least every five years) for Timber Supply Areas (TSAs) and Tree Farm Licenses (TFLs). The TSR process begins with assembly of a data package (followed by a period of review), an analysis report detailing inventory status, uncertainty and assumptions and a potential timber forecast, (followed by a period of review) and finally the AAC rationale and determination and how the factors were considered and reviewers' comments addressed.

The Chief Forester's rationale can instruct on items with the greatest uncertainty, such as inventory or research and inform how best to improve the information before the next AAC determination decision. Strategic forward looking documents improve scheduling, staff effort and budget allocations. TSR has served as a systematic, unifying strategic planning tool within the

Ministry of Forests and has wide support within those directly affected by changes in AAC. TSR is a good process.

A Chief Biologist would also be guided in legislation to consider factors such as: historic distribution of species, current status, expected trends, population estimates, recovery groups' advice to government and social direction from government. A decision support system similar to TSR, would support periodic environmental determinations. Such a framework, managed by Ministry of Environment, may lead over time to increased effectiveness, efficiency, accountability and transparency of fish, wildlife and conservation decisions. The TSR process is inclusive and invites those with direct involvement or concerns an opportunity to review and provide better information through timely written submissions. Such a process allows for systematic involvement and review by groups such as First Nations, guide outfitters, non-government organization and others. It clarifies inventory data, forecasting assumptions and how information from recovery teams has been applied.

A Chief Biologist can inform on species but responsibility for habitat-limited species is shared with ministries that manage these ecosystems. To be effective, a Chief Biologist's

Continued on page 12

Overview of 'Sustainable Forestry Benchmarks For British Columbia: A Geographic Information Systems Assessment of Underdeveloped Watersheds as Ecological Monitoring Units

By Mike Fenger and Matthew Wheatley

Effective ecosystem monitoring requires valid comparisons between managed and reference areas, the latter consisting of representative areas that are considered as close to natural as is available within any given ecologically similar forested area.

Forest management in British Columbia has fundamentally altered the structure of most forest ecosystems, which has created the need to develop forestry-based monitoring programs that identify ecosystem changes over time.

A key step yet to be done in this process is to inventory

"Chief Biologist".....continued from page 11

information would require cross-ministry recognition. Habitat on Crown land outside of Parks in BC is the responsibility of the Ministry of Forests. A Chief Biologist would periodically set conservation and consumption goals within a fixed geographic area.

It is expected that sustaining non-listed fish, wildlife and listed species and ecosystems will not become easier in the coming decades. Looking at the track record of AAC decisions and the improvements over the last decade in TSR, having a Chief Biologist may be a good way to meet and account for environmental sustainability challenges. At the very least, a

Concise Overview of Sustainable Forestry Benchmarks Assessment Report

- Natural benchmarks are considered critical for providing a scientific basis for understanding and monitoring changes in ecosystems resulting from forest development
- The term Sustainable Forestry Benchmarks has been adopted in this report to describe potential control or reference areas
- Parks and Protected Areas (PPAs), provide *de facto* SFBMs, but no effort has been made to previously identify and assess undeveloped areas with these as potential as SFBM candidates

This project assessed forest ecosystems to find areas that could serve as SFBMs both within and outside of PPAs.

available reference areas for use in forest monitoring contexts. The objective of this

Chief Biologist deserves further discussion by all those with concerns about managing the environment in a sustainable manner. It would open a new dialogue and over time, provide an avenue for organizations like FER to provide periodic input for sustainable management.

Mike Fenger lives in Victoria with his family. He was the forester with Ministry of Environment providing advice on conservation of forest biodiversity over his 30-year government career. Since 2004 Mike has been in private practice advising on sustainable forestry practices, planning and restoration through his forestry consulting firm Mike Fenger and Associates Ltd. Contact Mike at mfenger@pacificcoast.net. (250) 595-1986

report is to define and locate within British Columbia, forest-biomonitoring reference areas, termed here as "Sustainable Forestry Benchmarks" (SFBMs).

We define SFBMs as undeveloped, watershed-scale areas that are representative of current natural forests, and that are suitable for use as biomonitoring reference areas. We employ Geographic Information Systems (GIS) to define "undeveloped watersheds" using the following criteria from a candidate set of more than 19,000 watersheds province-wide: percentage forested, variability in wood volume per hectare, and degree of road development.

Once defined, we assess the percentage of candidate areas within Parks and Protected Areas, and provide quality

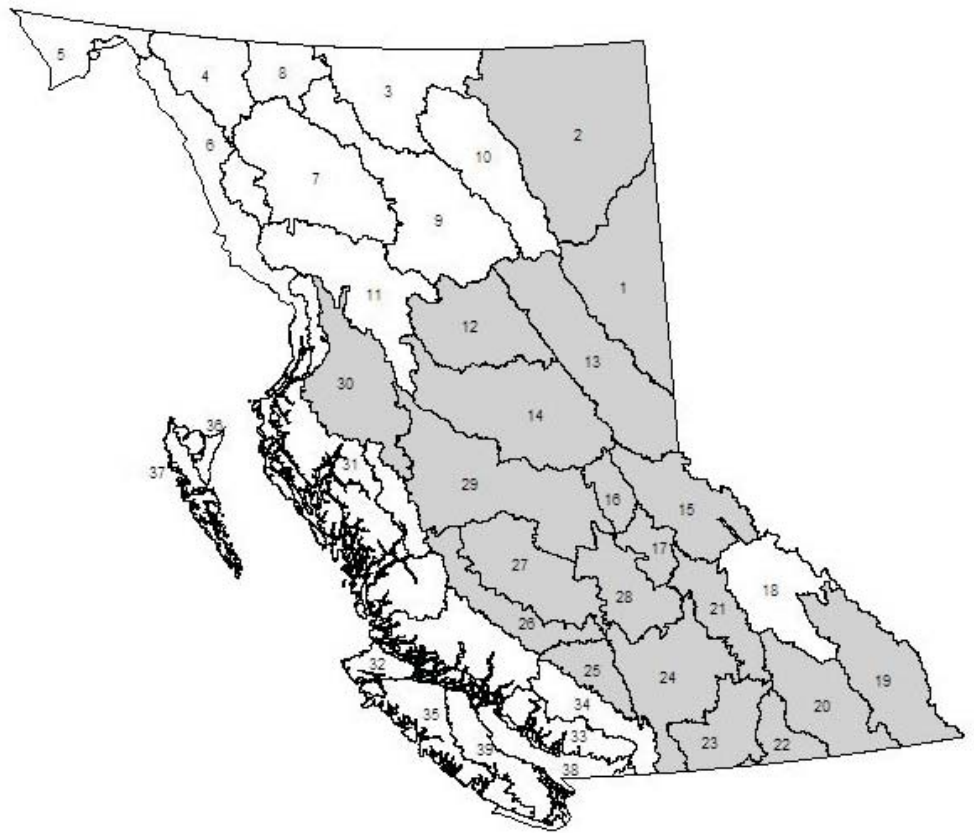
ranks and physical maps for each candidate undeveloped third-order watershed in the Interior of British Columbia. Implications regarding large-scale biomonitoring are discussed.

This assessment groups the province using study areas derived *a priori* from eco-regional classification and major drainage systems. Thirty-nine study areas were identified province-wide. (see map).

We completed analyses for 20 of these study areas (shaded on map), chosen based on priority areas most affected by mountain pine beetle. Each study area was mapped to show the location and color-coded quality rank of undeveloped watersheds located within. Detailed maps for each study area show provincial watershed identification numbers so readers can link individual watersheds to actual locations, and to summary tables outlining: 1) the 15 highest ranked candidate SFBM watersheds within each study area; and 2) SFBMs with the highest percent area in existing PPAs.

The 20 study areas have candidate SFBMs watersheds which are:

- 1) entirely within Parks and Protected Areas (PPAs) (units 20, 21, 22),
- 2) mostly within PPAs (units 13, 23, 24 26, 29)
- 3) primarily outside of PPAs



Map of British Columbia showing the 20 study areas with candidate SFBM watersheds

- (units 2, 12, 13, 14, 17, 19, 25, 27, 30)
- 4) limited or poor quality (unit 1)
 - 5) no longer available (units 16 and 28)

The full report provides definitions and benefits such natural areas provide in the face of profound change and uncertainty, analysis method and links to climate change. Key words include sustainable forestry, undeveloped watersheds, representative landscape/watershed level benchmarks, ecosystem monitoring, bio-monitoring reference areas, results-based forestry, cumulative effects, GIS

assessment, mountain pine beetle. Most of this 118-page report is maps and tables of findings. It is available at <http://www.forrex.org/publications/other/other.asp>

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Visit our website at:
www.ecoreserves.bc.ca



Heartfelt Gratitude from the Recipient of The Vicki Husband Scholarship

By Ashley Akins

September 7, 2007

Dear Friends of Ecological Reserves

I would like to send my heartfelt gratitude and introduce myself as the honored recipient of this year's Vicki Husband Scholarship.

I am a 22-year-old fourth-year University of Victoria student majoring in Environmental Studies and Spanish, and minoring in Professional Writing: Journalism and Publishing. I am also pursuing the co-op option, hoping to gain experience in my field before I graduate. I am currently applying for a lofty dream – an unpaid internship at the National Geographic Society.

My studies and interests have sent me over the past few years to Central and South America where I traveled to many countries including Guatemala and Columbia to learn the Spanish language and culture. I lived in Ollantaytambo, Peru last summer and founded an organization called the *Mosqoy Foundation* (meaning "Dream" in the indigenous language of Quechua) in the hopes of helping to sustain the communities of the Andes. Within this organization are two projects: the *Youth Bank*, an education fund to send 20 high school students per year from the campesino villages to study at a post-secondary institute in Cusco, and *Proyecto Colibri*, a textiles revitalization program, supporting weavers and local projects in the hopes of preserving their valuable art, culture, and language. The idea of this project is to promote reciprocity towards the earth, and within the youth and elders in the community, while preserving the ecology and natural traditions in the midst of rapid development and tourism. The Mosqoy Foundation has become my life over the past year, as I am determined to realize the promise I set out for myself and the communities of the Sacred Valley. I returned to Peru this summer to ensure that the project can be sustainable. If you are interested, please

check out the website: www.mosqoy.com.

This year, I am continuing my work with the Capital Regional District Parks, and am currently working on a proposal to install a Living Roof in one of our nature centres. In addition, with the guidance of Dr. Nancy Turner, I am beginning – as of this fall – to write and publish my first book.

I believe that learning is a life-long process, and that as long as one keeps their eyes and heart open, they are never finished learning. I hope to continue my search for knowledge, through eventually attending graduate school, but also through real life experiences, exploring cultures, languages and the ecology of our vast planet. My goal is to become an international photo-journalist, writing and photographing for magazines with issues regarding human rights violations and environmental causes. I believe that the best way to change the future of our planet is through communication, as awareness is the first step towards changing thoughts and actions. I am fascinated by anthropological linguistics, and hope to be able to communicate in many more languages as I continue my pursuit of making a small but positive difference in this world.

Thank you for helping me to pursue my dreams through your selfless generosity. I also want to thank you for your faith in youth – your belief that us students at Uvic will use our resources wisely and to the best of their abilities to follow our dreams, work hard, and strive to make a positive impact. With the means, we can do a lot. But more than that, it means so much to us to know that there are people, even strangers we have never met, who want to support us in our endeavors to do so. So thank you. I promise to make your contribution the beginning of a "pay it forward" chain and make the most of it that I can.

Sincerely,



Ashley Akins

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Just So You Know

Update on the Status of Vance Creek Ecological Reserve and Expansion Plans at Silver Star

In the Spring 2007 edition of *The Log* we printed a letter written by Friends of Ecological Reserves to Drew Carmichael, Regional Manager, MOE and Ken Cunningham, Manager, Water Stewardship Division, MOE regarding our alarm over the planned expansion at Silver Star and the potential impacts to the Vance Creek watershed.

FER received a reply to this letter on March 7, 2007 from Duane Wells, Assistant Regional Water Manager of the Water Stewardship Division, MOE, assuring us that our interests/concerns would be fully considered before a final adjudication of the application for a Water Licence by Silver Star Ski Resort.

A follow-up response from the Ministry on September 26, 2007 advised that they are awaiting further hydrology information from Silver Star. Once this additional information is in hand, the adjudication of the Water Licence will be continued and we will be kept informed.



Mary Rannie indicates a Stone sheep rub area on south slope of Fort Graham Portage
(photo by Len Vanderstar)

The Log



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