

## FRIENDS OF ECOLOGICAL RESERVES NEWSLETTER

You might notice a predominance of marine-related articles in this issue of the LOG. There is a heightened interest in protection of marine areas by the federal government which has led to the Marine Protected Areas (MPA) process now underway in B.C. (see article on page 9). This LOG also explores the issues of increased pollution on our shores and the federal government's cost-saving plan to de-staff four lighthouses including the one on Trial Island (see articles on pages 6 and 9).

Friends of Ecological Reserves are concerned about which form of protection would best benefit marine ecosystems. Is it the MPA as proposed by Fisheries and Oceans Canada? Or perhaps the Marine Wildlife Conservation Area (MWCA) scenario. The jury is still out on this, but one thing we do know, we have lost two Ecological Reserves that have gone to the National Park system under the Gulf Islands National Park (see article in the Autumn 2008 edition of the LOG). And we're not yet sure what form of protection this will provide for these critical habitats.

### A Dialogue with MOE

By Mike Fenger, President FER

First a big thanks to Eva Riccius for helping maintain and improve communications between FER and the provincial Parks program staff after Jennifer Smith left last year and a welcome to Tory Stevens and Judy Miller who have now taken on this role. Tory and Judy, we look forward to working with you both.

Garry Fletcher, Wynne Miles, Mary Rannie, Tom Gillespie and Mike Fenger met with Tory Stevens and Ken Morrison on July 22<sup>nd</sup>. It was a good meeting and

we were able to improve understanding of how to integrate activities for improvement of Ecological Reserves.

FER posed a number of questions beforehand to which Tory and Ken responded. Here is a summary of the major items discussed and steps towards solutions. The topic areas were:

- A. Improving support for the Wardens Program
- B. Expediting Research Permits for work in Ecological

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[www.ecoreserves.bc.ca](http://www.ecoreserves.bc.ca)

# The Log

Autumn/Winter 2009

*The LOG* is published 2 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 Spring/Summer issue of *The LOG* is January, 2010.

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Memberships are based on a calendar year.

Individual: \$20, Family/Institutions: \$25

Students/Seniors: \$15

Charitable BIN # 118914597RR

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Reserves

- C. Proposed Ecological Reserves listed under the former Ecological Reserves Program
- D. Status of the proposed ER in the Spatsizi Park
- F. Clarification of Provincial Policy on Marine Protected Areas
- G. Access to Ecological Baseline Data and ER specific Conservation Assessments

#### A. Improving Support for the Wardens Program.

##### Question 1. Who maintains the list of active wardens?

**Discussion.** Friends of Ecological Reserves maintain a list of FER wardens. Currently the LOG newsletter is mailed to 89 wardens by FER staff (Tom Gillespie).

There are 38 Area Supervisors (AS) in the nine Ministry of Environment (MOE) regional offices who can recruit new wardens. Therefore FER may not be aware of additions or deletions to ER wardens initiated by AS. There are differing levels of communications between AS and ER wardens so some Area Supervisors may have current contact information for their ER volunteers and up-to-date addresses, e-mails and phone numbers and others may not.

It was agreed that MOE would distribute the FER wardens' list to the AS so it can be corrected and up-dated. The volunteer contact information will be treated as confidential and used only by FER for communications purposes such as the LOG mailout and other essential communications needed to maintain the wardens program. It was expected that Area Supervisors would have a list of ER wardens for ERs in their

area. There is no MOE maintained provincial ER wardens list at this time. Regional and provincial ER lists can be compiled from records kept by AS.

**Follow-up.** The request for a review of the wardens' list was initiated by Tory and communicated to AS by Judy Miller on a province-wide conference call. Judy has been updating the list and we can expect to see it soon. Judy is also facilitating the creation of a generic ER-informational powerpoint presentation.

##### Question 2. Do Area Supervisors and volunteer wardens know that FER has some funds to help defer their travel expenses to attend regional meetings should these be initiated by their Area Supervisors?

**Discussion.** FER has funds allocated by MOE in the past for regional meetings and some surplus funds remain after the initial round of regional meetings. These funds can be applied toward regional meetings until they are spent. It was suggested that a letter be jointly developed and e-mailed to AS about warden travel funding support. The FER-held funds were to ensure travel expenses did not act as a barrier to warden participation. As it is not appropriate for FER to e-mail the 38 Areas Supervisors, it was decided that travel support would be communicated within Parks.

The Okanagan appears to have the best model for ER warden – Area Supervisor communication. In the Okanagan there are annual meetings, field trips to ERs and coordination of planning over maintenance of ERs. (See Eva Durance's report on page 3).

The Okanagan Region is the only region from which ER

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# Okanagan Region's Annual ER Wardens' Meeting and Field Trip

By Eva Durance

Summer has waned and the advent of fall signals catch-up time for people who have spent the past few months happily (well mostly!) working and playing outdoors. It's also an excellent time for Ecological Reserve wardens to gather together with Parks staff for a general update (from both groups) to review the past year, and to discuss future projects and activities.

On a cool dampish October 16th, the Okanagan Region of BC Parks did just that. After a morning meeting, we reminded ourselves why we do this work, by taking an afternoon hike to the Trout Creek ER with longtime Warden Laurie Rockwell leading the way.

Sara Bunge, Senior Ranger for the South Okanagan, most capably organized the event as she has for the past three years. All but two wardens were able to attend. The ER wardens greatly appreciated that the Area Supervisors and other Rangers took the day from their very busy schedules to attend as well. One of the very important and enjoyable aspects of these meetings is making and renewing acquaintances among staff and wardens.

The morning was spent with wardens' verbal reports on their particular ERs; a presentation by Orville Dyer, Wildlife Biologist, about rare and threatened plants in our Region and the Ministry's current focus on preventing wildlife and plant populations from becoming threatened; a talk by Don Gayton, grassland ecologist,



Okanagan Regions Annual ER Wardens' Meeting attendees

gist, on vegetation surveys and monitoring; and a short presentation by Sara Bunge on photo monitoring dos and don'ts. Wardens with ten or more years with the program were also most pleasantly surprised to receive recognition certificates and thank-you gifts from John Trehwitt, Section Head, Parks and Protected Areas.

After a delicious lunch, the group repaired to Summerland for the Trout Creek ER hike. The rain that accompanied us as we drove there stopped just as we arrived, a welcome coincidence even though the area badly needs rain.

During the hike, Don Gayton gave us a field demonstration of how to set up and interpret vegetation plots along a transect using a Daubenmire frame and discussed other aspects of the arcane art of vegetation surveying and monitoring. Laurie Rockwell

pointed out a number of interesting changes in the ER over the 17 years he's been warden, many to do with declines in populations of weeds such as Diffuse knapweed and Dalmatian toadflax following BC Parks' introduction of biological controls for these invasive species. The ER is bunchgrass grasslands moving towards a dry Ponderosa-pine and Douglas-fir forest and it was a delight to be in an area so lightly touched by weeds or other human intrusions. Birds were scarce, but Red-breasted Nuthatches and Clark's Nutcrackers chattered incessantly.

Once again, I urge wardens and Parks staff in other Regions to repeat the meetings most have had over the past two to three years and if possible to include a field trip. The value for wardens, and I think for staff as well, is well

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## Environmental Studies and Biology Student Thanks Vicky Husband for Scholarship Award

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President,  
Friends of Ecological Reserves of B.C.

Dear Sir/Madame:

I would like to thank you for the award I recently received, the Vicky Husband Scholarship. I received the award from the Environment Studies Department at the University of Victoria, where I am studying for my undergraduate degree in a double major of Environmental Studies and Biology. In this program my focus is on plant taxonomy and Ethnobotany, where I hope to examine how indigenous and non-indigenous cultures organize and recognize their floristic world, and how these plants are used to sustain and enhance their lives. I am interested in local classification schemes, and also in comparing these to the classification scheme accepted by western scient. Coming from Shaw Island, WA, a small island in the San Juan Islands, I have developed an appreciation for both the importance of learning from your elders, and for observing the natural landscape around you. Both these lessons have been very important in my research to date and I'm sure will only continue to grow with my studies.

This award was very nice, as I am one of the many students that work throughout the school year, and every bit helps. I keep myself very involved in undergraduate clubs and activities as well, which leads to a busy schedule. I have rounded out school and work with participating in the Scottish Country Dance club, and playing ultimate Frisbee and softball, and off campus activities like Morris dancing, playing fiddle in jamming sessions and gardening in the UVic community gardens.

I am now nearing the end of my degree, with only a couple years left. At the end, I am planning to go straight into my Masters degree at UVic, with Dr. Nancy Turner. I will be examining native crabapple (*Malus fusco*) used by several First Nations Peoples along the coast of British Columbia.

I hope the coming year finds you well.

Sincerely,



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## CALENDAR

### Christmas Bird Count Saltspring Island Monday, December 28

Contact motmot@shaw.ca or  
phone: 250-652-6450 or for  
Saltspring contact Jean Brouard  
(johnbro@saltspring.com)

### Christmas Bird Count Sooke Sunday, December 27

Contact Daniel Bryant at 250-  
361-9049

### Christmas Bird Count Duncan Friday, January 1

Contact Derrick Marven at:  
marven@shaw.ca or phone  
250-748-8504

Check the Victoria Natural  
History Society website for  
more details at  
[www.vicnhs.bc.ca](http://www.vicnhs.bc.ca)



Visit our website at:  
[www.ecoreserves.bc.ca](http://www.ecoreserves.bc.ca)





*“Okanagan Region”...continued from page 3*

worth the time and effort involved. Note too that FER still has funds to offset some travel costs to such meetings. As wardens in the Okanagan Region, we

are blessed with Parks’ staff who make a special effort to keep in contact with us. However, if your Region has not held a meeting recently, I’m sure that staff in other Regions would also welcome the idea.

*“A Dialogue”.....continued from page 2*

wardens have requested travel support from FER in 2009. It is not clear whether this means that the Okanagan Region was the only region that has held wardens meetings in 2009 or whether this is the only region that is aware of the available support.

**Follow-up.** The FER-held financial assistance was communicated by Judy Miller of BC Parks during the fall AS conference call.

### **B. Expediting Research Permits Ecological Reserves**

**Question 3.** What is the process for obtaining a research permit in an ER and how can it be streamlined?

**Discussion.** FER has concerns about the amount of “red tape”

and the cumbersome and protracted approach that exists with regard to obtaining research permits in ERs and Parks. There are horror stories of researchers making requests for research permits and being told these would take up to 140 days before the issue of a research permit could be decided. The end result has been that researchers are dropping projects in Parks and ERs due to long delays in permitting. FER considers 60 to 140 days turn around times inappropriate for research permits. The opportunity and planning that goes with some small projects and the window of opportunity to monitor and inventory flora and fauna can be lost if there are delays. For example inventory and monitoring of flowering plants and

species at breeding colonies means the bureaucratic schedule needs to bend to the biological imperative of the field season.

FER is very supportive of research in ERs as this is one of the principle reasons ERs were designated. To shed some light on the current process, those involved with permitting were asked to write an article clarifying the requirements. It is hoped that this article will also been shared with Parks Area Supervisors who review the research applications.

**Follow-up.** We are grateful for the article entitled “Research in Ecological Reserves” (page 8 of this LOG) written by Nathalie Dechaine of BC Parks to clarify the permitting process. We also hope this information is shared with the AS

### **C. Proposed Ecological Reserves Listed Under the Former Ecological Reserves Program.**

**Question 4.** What ecological reserves were proposed when there was an ER program and which did not become designated as ERs?

**Discussion.** FER is interested in this historic list of proposed ERs as they were assembled at a time when there was a provincial ER program staffed by qualified scientists. It is of interest to understand which of their proposals did not make it through the process for expansion of the Parks and Protected Areas during the 1990s. Land use planning tables were made up of selected stakeholder and final recommendations based on consensus. Each land use plan had a different array of stakeholders with differing backgrounds and there was an increase in the ER system – 16

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# Plastic Trash on Beaches May Shock You

By Mike Robinson

Excerpted from the October 11, 2009 edition of the *Times Colonist*

Even the shortest stroll on any one of Victoria's beaches will reveal that British Columbia's beauty and cleanliness is being diminished by the astonishing amount of plastic garbage that ends up in the oceans every year.

Almost 90 per cent of marine litter is plastic, a product that scientists say takes 400 to 1,000 years to break down. This means that every piece of plastic ever made still exists in one form or another.

I could bombard you with frightening facts about how the chemicals added to plastics are carcinogenic and disrupt the endocrine system, or how tens of thousands of seabirds get tangled in plastic debris and at least 100,000 seals, sea lions, whales, dolphins and sea turtles have suffered the same fate.

I could mention the Great Garbage Patch, a region in the north Pacific Ocean larger than our province where there are hundreds of thousands of plastic fragments per square kilometre or how 500 billion plastic bags are manufactured each year. But these numbers are so vast they boggle the imagination and seem to create a form of paralysis in people.

The best way to illustrate the magnitude of the problem, and to understand how it affects all of us, is to go for a walk on the beach and closely observe what lies tangled beneath your feet. The larger pieces stand out, but the closer you look, the more tiny particles you see. These are consumed by organisms and



Trial Island Lighthouse (Photo by Darren Stone, *Times Colonist*)

make their way up the food chain.

In the last five years, I have picked up hundreds of garbage bags of plastics and styrofoam from Victoria-area beaches.

Certain beaches collect more debris than others. Whiffen Spit in Sooke and Trial Island off the coast of Oak Bay are particularly effective collection beaches and in a way they represent opportunities. The ocean is returning our waste to us so that we can deal with it. By focusing on these collection beaches we can make a significant contribution to ameliorating the problem.

But whose responsibility is it? Neither the federal, provincial or municipal governments take responsibility, while the vast majority of individuals blithely walk right over the trash. We are becoming conditioned to accepting plastics as a natural fixture of flotsam and jetsam.

My motivation is personal. In particular, I care about the effects plastics have on animals, but it was pointed out to me that I am contributing to the social capital, making the beaches better for everyone. Mostly it is a lonely

experience and, though there is some satisfaction, to return a few months later and find the beach soiled once again is quite demoralizing.

In short, I can't do it all myself and I need your help. You can contribute by using less plastic, ensuring any plastic you do use is recycled and by picking up any plastics you see that have escaped the waste stream.

Alexander Pope said, "Do good by stealth, and blush to call it fame." I embrace this perspective, but there comes a time when a warning cry has to be shouted from the rooftops.

I'm shouting now. For our children's sake, we have to end the environmental vandalism our culture has embraced and to get on with becoming Earth's stewards, the most important mission humankind has ever undertaken.

It starts with you. It starts today. Go to any beach on the south Island and begin to lead by example. We can't afford to wait. Do it now.

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new ERs were created between 1996 and 2000.

The ER program was also focused seemingly on biological hotspots or zones of ecological and biological richness which is consistent with the ER legislation, and these smaller areas are more easily advocated for in the social and political realm.

Another major goal for creating ERs as Vladimir Krajina, the leader of the development and implementation of a network of ERs in B.C. envisaged, was for foresters to learn how representative natural systems functioned. This never fully materialized in ERs and also was not a key criterion in the Protected Areas Strategy (1995).

In summary, happy and supportive as FER has been with the current suite of ERs, FER does not believe the current ER system and network of ERs should be considered complete nor adequate to provide the science-benchmarks to meet the goals set out in the ER legislation which is to guide use toward sustainability and stewardship in B.C.

Climate change has become a bigger agent of change/stress. The concept is scientifically accepted and assessing the vulnerability of species to shifts in climate can only be helped by a review of existing and proposed ERs

"Plastic on Beaches"....continued from page 6

*Mike Robinson is a lighthouse keeper on Trial Island who believes in the importance of individuals making positive contributions to the world, no matter how small. He has committed himself to ensuring that the island, an important ecological reserve, is kept as clean as possible.*

together with other high value habitats. Where these biologically rich areas occur today, will also indicate the future nodes where there will be high diversity for plants and animals. Were some of these features on the list of proposed ERs?

A review of existing ERs by Hans Roemer, and potential boundary expansions was discussed and this review also made available. Some of these earlier recommendations for changes in ERs have been acted on. These were primarily additions to increase the boundaries. However where increases were achieved, it was through a shift in adjacent land to Park status and not through changes to ER boundaries.

**Follow-up.** The files listing the older proposed ERs were made available to FER. The utility of these proposed ERs is under review in light of the above discussions.

#### **D. Status of the Proposed ER in Spatsizi Park**

**Question 5. What is the status of the proposed Fort Graham Portage ER that was recommended to Skeena Regional Manager in December 2008?**

**Discussion.** FER made two trips to Spatsizi, one to advise park managers on the adjustment of Gladys Lake ER boundaries and a second trip to look at the creation of a new ER centred on a mineral lick within Spatsizi Park. Despite the agreement of the stakeholder committee and the recommendation of the committee to proceed with this ER designation, it is not moving ahead at this time because of First Nations concerns about potential future restrictions to commercial

activities.

**Follow-up.** FER will follow up with MOE Skeena Region Parks staff and offer to help communicate the benefits of ERs with First Nations. Other than commercial and resident hunting, it is unclear what other activities were of concern that could not be dealt with should the area receive ER status.

#### **E. Biological Information on Existing ERs.**

**Question 6. What is the status of the ER manual and FER and ER wardens review of this manual?** See article by Tory Stevens in the Spring 2008 LOG.

**Discussion.** Parks conservation staff in Victoria has recently been halved. This makes it hard to finish the edits and get consistency on the ER manual. Checking and standardizing items such as plant list names are time consuming. Area Supervisors also need to review the ER data as there may be information in regional files not accessible to Victoria Parks staff that will help to finalize this manual. This project has been on going for a number of years and was hugely helped by Jennifer Smith when she was an auxiliary.

It was questioned whether it was necessary to wait until AS review ER fact sheets before information can be released for wider review by ER wardens and others outside of government who may wish to review the information. It was requested that information in the ER manual be posted and made available with a covering statement indicating their draft nature. This would enable ER wardens and others to access and edit too if they felt so inclined. With FTP sites and

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# Research in Ecological Reserves

By Nathalie Dechaine

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The *Ecological Reserve Act* and the corresponding regulations are very clear; permits in Ecological Reserves (ERs) may only be issued for scientific research and educational purposes and those activities may only take place when authorized by a permit. In other words if you want to conduct any kind of ecological research activities in an ER, you need a permit.

However, not all proposed research activities in an ER would necessarily be authorized. The proposed research activities must clearly be relevant to one of the five purposes for which ERs are established (see Section 2 of the *Ecological Reserve Act*):

- a) areas suitable for scientific research and educational purposes associated with studies in productivity and other aspects of the natural environment;
- b) areas that are representative examples of natural ecosystems in British Columbia;
- c) areas that serve as examples of ecosystems that have been modified by human beings and offer an opportunity to study the recovery of the natural ecosystem from modification;
- d) areas where rare or endangered native plants and animals in their natural habitat may be preserved; and
- e) areas that contain unique and rare examples of botanical, zoological or geological phenomena.

## Applying for an ER Permit

So how does one go about getting an Ecological Reserve

permit for research? The first step is to apply in writing. The Permit and Authorization Service Bureau (PASB) can be contacted by using the toll-free number or PASB (1-866-433-7272, extension #3) or an application form can be directly accessed via their website: [http://www.env.gov.bc.ca/pasb/applications/process/park\\_use.html#a2](http://www.env.gov.bc.ca/pasb/applications/process/park_use.html#a2). There is no application fee or any other permit fees charged for ecological research in parks and protected areas as research is deemed to be a public good.

## Application Review Process

The proposed activities are then assessed by regional staff to ensure that they are consistent with the purpose for which the ER was established. Then, BC Parks staff conducts an impact assessment using the established process <http://www.env.gov.bc.ca/bcparks/conservation/impact/impact.html> to determine if there are any social, cultural or ecological impacts associated with the proposed research activities. If the activities are deemed suitable, BC Parks staff then consults with First Nations and/or other stakeholders. In some cases, this may involve coordinating with other jurisdictions or with other regions, particularly when the proposed research activities take place over a larger geographic scale. Once a complete application is received, BC Parks strives to process, adjudicate, and issue an Ecological Reserve permit in 60 business days.

## Active Research in Ecological Reserves

Currently, there are approximately 15 research projects occurring in Ecological Reserves

across the province of British Columbia that range from a few weeks to a few years in length. Most of the research in ERs involves inventory and monitoring activities and is conducted by academic institutions or governmental agencies.

## After the Research

One of the benefits of supporting research activities in parks and protected areas is that the Ministry of Environment receives a copy of all research results. Within six months of completing research authorized by an Ecological Research permit, Section 10 of the Ecological Reserves regulations requires the permittee to submit a report to BC Parks. This report must include (if applicable) the following: the methodology used, any inventories taken, a description of the land forms and soil conditions in the research area and the results, conclusions and/or recommendations stemming from the research activities. BC Parks keeps all research reports on file in each of the regional offices.

*Nathalie Dechaine is a Permit Analyst with BC Parks*  
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*As MOE benefits from the free science information that researchers bring, FER feels that the current permitting process needs to be reviewed and significantly improved in order to provide better service to the research community. If MOE and FER are to attract researchers and their funding, the current process is too protracted, in our opinion. FER wishes to work with MOE to seriously expedite its permit process. By comparison Ministry of Forests & Range staff must process small scale salvage permits and approve or deny a permit request within two days of receiving a request.*



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# Trial Island Lighthouse, Three Others To Lose Keepers

By Robert Barron, Canwest News Service

Excerpted from the September 3, 2009 edition of the *Victoria Times Colonist*

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**A** lighthouse on Trial Island, off Oak Bay, is expected to lose its keeper soon as the federal government seeks to cut costs.

The fully automated lighthouse is one of four along B.C.'s coast that the federal government is looking to destaff in the near future, with more expected in a second phase. The others are Entrance Island off the tip of Gabriola Island, Dryad Point near Bella Bella and Cape Mudge on Quadra Island.

As automated technology advances, the need for lighthouse staffing is diminishing, Coast Guard officials say, and removing staff members will reduce costs. Advocates of lighthouse staffing who have fought automation for years, disagree and note that lighthouse keepers have saved hundreds of lives and offered maritime assistance thousands of times over the years.

The controversial issue of the destaffing of lighthouses on all of Canada's coasts has been ongoing since 1985, when officials in Ottawa began questioning the need to have staff members and automated technology in lighthouses. In the face of strong opposition from lighthouse supporters, the federal government halted the destaffing program in 1998.

Nine of B.C.'s 27 lighthouses are fully automated and staffed.

Jim Abram, a longtime keeper of the lighthouse at Cape



Lighthouse at Trial Island, off Oak Bay, is to lose its keeper soon as the federal government looks for ways to save money. (Photograph by Adrian Lam, *Victoria Times Colonist*)

Mudge, said it was “only a matter of time” before the government turned to destaffing lighthouses again as a cost-saving measure.

“It’s absolutely essential that our lighthouses remain staffed for many reasons, including the fact that our lighthouse keepers have saved hundreds of lives over the years that wouldn’t have been saved if they weren’t there,” Abram said.

“Providing regular marine weather reports from lighthouse locations, which is very important information for mariners, is one of the keepers’ main jobs, but now there are many times when reports from fully automated lighthouses aren’t readily available and this wouldn’t happen if they were staffed 24/7.”

Susan Steele, regional director of maritime services for the Canadian Coast Guard, visited staff members at the four lighthouses this week. The schedule

for their removal has not been established.

Steele said Canada is the only developed country in the world that still staffs fully automated lighthouses. Other jurisdictions that rely on automated and unmanned lighthouses are not experiencing the problems that the critics claim, she added.

“We need to recognize what technology can do these days and we’re looking to use our resources and people more productively in other roles,” she said.

**FER strongly supports maintaining a lighthouse keeper on Trial Island because they can monitor biological and human activities. The human presence on Race Rocks ER has provided excellent safeguards for this ER. Automating Trial Island Lighthouse will increase the likelihood of damage to this ER.**

# Race Rocks ER Considered for Marine Protected Area by DFO

By Mike Fenger and Garry Fletcher

Canada has less than one percent of its marine ecosystems in Marine Protected Areas status. B.C. has lagged behind the Maritime Provinces with less than 0.5 percent. Currently there are only two off shore seamounts that make up the B.C. Marine Areas system and these have been established through Department of Fisheries and Oceans (DFO)-led consultation processes. Australia on the other hand, is in the enviable position of having 16 percent of their marine ecosystems in protected status.

Table 1 shows the different Federal and Provincial Departments/Ministries with a mandate to manage some elements of the marine ecosystems. This table shows the complexity of overlapping



Race Rocks Ecological Reserve (photo by Garry Fletcher)

jurisdictions, the different purposes and jurisdictional tools.

Perhaps in response to a bigger unifying vision, the B.C. Ministry of Environment has recently begun to develop an Ocean's and Coastal Strategy which, in addition to economic benefits, also envisages main-

taining and improving the health of marine ecosystems through ecosystem-based management. This new, broader look at marine ecosystems is a welcome addition that can potentially improve the long term viability of the marine based ERs. Friends of Ecological

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**Table 1. Federal and Provincial Marine Protected Area Programs** (Courtesy of Canadian Parks and Wilderness Society)

	Parks Canada	Department of Fisheries and Oceans	Environment Canada	Ministry of the Environment - BC	Ministry of Agriculture and Lands - BC
<b>Designation</b>	<ul style="list-style-type: none"> <li>National Marine Conservation Areas</li> </ul>	<ul style="list-style-type: none"> <li>Marine Protected Areas</li> </ul>	<ul style="list-style-type: none"> <li>Marine Wildlife Areas</li> <li>National Wildlife Areas</li> <li>Migratory Bird Sanctuaries</li> </ul>	<ul style="list-style-type: none"> <li>Provincial Parks</li> <li>Provincial Ecological Reserves</li> <li>Wildlife Management Areas</li> </ul>	BC Marine Ecological Classification
<b>Examples</b>	<ul style="list-style-type: none"> <li>Southern Strait of Georgia (proposed)</li> <li>Gwaii Haanas (proposed)</li> </ul>	<ul style="list-style-type: none"> <li>Endeavour Hydrothermal Vents</li> <li>Bowie Seamount</li> </ul>	<ul style="list-style-type: none"> <li>Scott Islands (proposed)</li> </ul>	<ul style="list-style-type: none"> <li>Desolation Sound Marine Park</li> <li>Checleset Ecological Reserve</li> </ul>	
<b>Legislation</b>	<ul style="list-style-type: none"> <li>National Marine Conservation Areas Act</li> </ul>	<ul style="list-style-type: none"> <li>Oceans Act</li> </ul>	<ul style="list-style-type: none"> <li>Canada Wildlife Act</li> <li>Migratory Birds Convention Act</li> </ul>	<ul style="list-style-type: none"> <li>Park Act</li> <li>Ecological Reserve Act</li> <li>Wildlife Act</li> </ul>	Planning tool for coastal planning, coastal management, and marine protected areas candidate identification.
<b>Goal</b>	Protect and conserve marine areas of significance as part of a representative network of protected areas.	Protect and conserve commercial and non-commercial fisheries resources, including endangered or threatened species, areas of high biodiversity or productivity, unique habitats, and marine mammals and their habitats.	Conservation of marine wildlife, with emphasis on marine birds, through the maintenance and restoration of supporting habitats.	<p><i>Park Act:</i> Protect representative examples of natural diversity, and special natural, cultural heritage, and recreational features within BC.</p> <p><i>Ecological Reserve Act:</i> Protect viable, representative examples of the natural diversity and exclude harvest of marine resources within the reserve.</p>	Advance efforts to establish Marine Protected Areas.
<b>Objectives</b>	<ul style="list-style-type: none"> <li>Representation of marine natural regions (physical, biological &amp; cultural)</li> <li>On-site interpretation</li> <li>Public education &amp; enjoyment</li> <li>Sustainable use</li> </ul>	<ul style="list-style-type: none"> <li>Marine resources</li> <li>Species and habitats</li> <li>Endangered species/habitats</li> <li>Unique habitats</li> <li>Areas of high productivity</li> <li>Biodiversity</li> <li>Sustainable use</li> </ul>	<ul style="list-style-type: none"> <li>Wildlife/Migratory birds</li> <li>Species and habitats</li> <li>Endangered species/habitats</li> <li>Productive, unique and sustainable habitats/ecosystems</li> <li>Biodiversity conservation</li> </ul>		

Reserves is advocating all marine-based ERs receive a buffer zone so the marine component of the ecosystem adjacent receives equivalent status whenever a marine protected area is declared.

Table 2 lists currently established ERs that protect biological features such as sea bird colonies and sea mammal breeding areas.

### The Race Rocks Consultation Process

FER is one of the "stakeholders" participating in the four advisory group meetings scheduled for completion by spring of 2010. Garry Fletcher has a long involvement as the warden for Race Rocks ER. Mike Fenger is, however, a relative newcomer to the ten-year consultation process and his input has mainly been to clarify what the Federal approach is to a system of protected areas. Other stakeholders associations represent sports fishing interests, scuba divers, whale watching tour operators and marina operators. The details of the advisory group meetings are available at the Race Rocks Advisory Board website maintained by Pearson College. (<http://www.pac.dfo-mpo.gc.ca/consultation/oceans/race/index-eng.htm>) Absent from these advisory group meetings are First Nations although there is a First Nations' consultant present at the meetings. DFO is holding separate consultation with First Nations.

Race Rocks ER has a long association with Pearson College

Table 2. Existing ERs to select from for a network of Marine Protected Areas system. Race Rocks (bolded) is the only ER that is currently under a DFO-led process that may result in a marine protected area.

1. Annie Vallee (Triangle Island)	13. Lepas Bay	21. <b>Race Rocks</b>
2. Balingall Islets	Moore/McKenney/Whitmore Islands	22. Rose Islets
3. Baeria Rocks		23. Rose Spit
4. Beresford	14. Mount Maxwell	24. Sartine
5. Brackman Island	15. Mount Tuan	25. Solander
6. Byers/Conroy/Harvey/Sinnett Islands Checleset Bay	16. Robson Bight (Michael Biggs)	26. San Juan River Estuary
7. Cleland Island	17. Pine/storm and Tree Islands (Duke of Edinburgh)	27. Satellite Channel
8. Canoe Islets		28. Ten Mile Point
9. Dewdney and Glide Islands	18. Klashkish River	29. Trial Island
10. East Redonda	19. Megin River	30. Tashish River
11. Francis Point	20. Oak Bay Islands	31. Vladimir J. Krajina (Port Channel)
12. Lasqueti Island		

For locations and purpose statements for these ERs access the Ministry of Environment site. [http://www.env.gov.bc.ca/bcparks/eco\\_reserve/ecoresrv/ecoresrv.html](http://www.env.gov.bc.ca/bcparks/eco_reserve/ecoresrv/ecoresrv.html)

which has maintained infrastructure on the island allowing this ER to function as an outdoor laboratory. As a result of this 30-year association, Race Rocks has a level of monitoring and study which is unparalleled in other ERs. The accessibility of the research and monitoring is phenomenal and a visit to the award-winning Race Rocks website is all that is needed to illustrate how much information on Race Rocks ER is available. (<http://www.racerocks.com/>)

As the Race Rocks ER warden, Garry shared the following insights. Ten years ago the final ratification of Race Rocks as a Marine Protected Area ground to a halt. There is now a renewed urgency on the part of DFO to complete the designation process by next year. The *Oceans Act* of 1997 lays out very clearly the intent to protect complete marine ecosystems with the organisms and their habitat, however the new round of advisory meetings is concerned only with the designation of the water column of the existing Rockfish Protection Area (down to 40 metres). This does nothing to solve jurisdictional problems in managing the

ecological reserve, and it does not bring together the role of Canadian Wildlife Service in the protection of seabirds and the department of transport in the protection of the airspace above marine mammal haulouts. B.C. Parks is responsible for the haulouts on the nine islets of the Race Rocks Archipelago. First Nations still have access, (as they always have from the Douglas Treaties) to the living resources of the area, and that arrangement has been negated only by proven conservation needs.

Race Rocks is unique among B.C.'s ecological reserves in that since 2001 it has included the land portion of Great Race Island, including all the built up infrastructure except the lighthouse as part of the ecological reserve. This infrastructure has made it ideal for research, education and supervisory management, but it has come with the cost of staffing, maintenance and upkeep, the bulk of which has been provided by Lester Pearson College. Pearson College has provided this service on a long-term lease from BC Parks and has paid for

Continued on page 12

staffing an eco-guardian for the island since automation by the Canadian Coast Guard in 1997.

This is obviously not sustainable in the long term without assistance from government. So far there is no firm indication that there will be any assistance from the Marine Protected Area process for the support of this on-site management. So what changes with MPA designation? We are beginning to wonder if the costs to establish this MPA have really been worth it.

Although federally established MPAs on the East Coast, (example Musquash in New Brunswick) involved a transfer of the provincial seabed to the federal government, the west coast provides a different scenario. The provincial government has made it clear that they will not allow any ceding of ownership of any seabed. (We understand this policy is also currently holding up the finalization of the Gulf Islands Marine Park.)

Some of the information in this article for FER members was distributed to the Advisory Group members and attached to minutes of the first meeting. It was not clear that all advisory group members are familiar with ERs and the importance of protecting representative and unique ecosystems of British Columbia. It is also unclear whether the importance to a system of natural benchmarks, research areas, educational resources and repositories of genetic materials and geologic features are recognized by participants as critical to inform-

ing decisions on management and sustainability of ecological diversity and productivity of our marine systems.

The Ecological Reserve system, in concert with other elements of British Columbia's protected areas system and resource management regime, supports protection, study and understanding of ecosystems, their resiliency, ecological processes and natural elements.

FER expectations raised at the October Advisory Group meeting for Race Rocks were:

- ▶ The boundaries of an MPA need to be based on best available information and make ecological sense in the long term.
- ▶ There will be a system of protected marine areas.
- ▶ The location of the MPAs in addition to Race Rocks will be strongly guided by conservation biology and best available science. MPAs will be supported in legislation with objectives for MPAs similar to provincial legislation and include:
  1. areas suitable for scientific research and educational purposes associated with studies in productivity and other aspects of the natural environment;
  2. areas that are representative examples of natural ecosystems in British Columbia;
  3. areas that serve as examples of ecosystems that have been modified by human beings and offer an opportunity to study the recovery of the natural ecosystem from modification;

4. areas where rare or endangered native plants and animals in their natural habitat may be preserved; and

5. areas that contain unique and rare examples of botanical, zoological or geological phenomena.
- ▶ Entry to reserves will be through permitting.
  - ▶ There will be a commitment for effective enforcement.
  - ▶ MPA will act as research benchmarks and monitoring sites for Federal and Provincial agencies to promote sustainable use of natural resources.
  - ▶ Existing ERs and Terrestrial Protected Areas with a marine component will be reviewed as a starting point for a comprehensive network MPAs.

### Additional Observations

There is no "target for a west coast or national system of MPAs." Since there is less than 0.5 percent in B.C., it is unclear what the Federal government believes is necessary to safeguard the nationally managed marine resources and what is the time frame needed to build a credible network of MPAs.

Those managing the Race Rocks process were not able to refer to higher longer term direction. This leads to the conclusion that there appears to be no commitment to or leadership for more than one MPA at this point in time.

Clarification or development of the Federal and Provincial agencies of a common vision

*Continued on page 13*

and a coordinated coast-wide process leading to a scientifically based MPA is unclear.

The willingness of stakeholders and management agencies to embrace MPAs as a safety net for resource management and sustainability is unclear and it is not widely accepted as a fundamental but missing piece of resource management.

The integration of First Nations' needs adds another layer of complexity and close linkages of FN cultures to the marine system is indisputable. Since all marine ecosystems have been traditionally accessible for harvesting, this adds an additional challenge. The willingness to forgo access will depend on the clarification of benefits to the greater good over the longer term both to First Nations and other interests. Since we are not privy to the MOU between DFO and First Nations, we do not know what is being discussed. Since MPAs have never been part of the DFO management paradigm, there is no historic precedent in DFO and it is unclear what research if any would be undertaken. Consequently there is no research showing the benefits. Some references on the benefits of MPA have been amalgamated on the Race Rocks website (<http://www.racerocks.com/race-rock/admin/rwab/rwab.htm>)

Visit our website at:  
[www.ecoreserves.bc.ca](http://www.ecoreserves.bc.ca)

## Wind Sentinell Deployed at Race Rocks

Excerpted from the Race Rocks Website



In October 2009, Lester Pearson College had an opportunity to participate in an off shore wind assessment test conducted by Axyx Technologies Inc.

Great Race Rocks was used to host the land station for an off shore buoy which was designed to record wind speed and direction data profiles up to 200 metres in height. The buoy called Wind Sentinell was anchored outside of the Race Rocks Ecological Reserve in the Strait of Juan de Fuca. Data from the buoy was relayed automatically every 10 minutes by cell phone to the instrument trailer on land and was transmitted to the internet

through the LAN on Race Rocks.

Adding this newly collected information to the existing knowledge base for the reserve is a major benefit. It will also be useful for planning future sustainable energy applications

The current wind measurements done by the Davis weather instrument installed on the ground level at Race Rocks often show at least 10 km/h difference in wind velocity when compared with the Environment Canada data from the top of the tower at 36 metres. A set of data with projections to 200 metres will provide an excellent profile for comparisons.

access, this data sharing should be easy.

**Follow-up:** It was agreed to provide the ER-specific data with a proviso that it is in draft form. This changes the current MOE process envisaged to finish this project. Clarification of the process and NGO edit process will be needed and communicated to AS. This has not yet occurred. FER will ensure that wardens and others i.e. naturalists are made aware of the data sheets and opportunity for citizen scientist to edit these fact sheets.

**Update:** the draft ER manual has been completely reviewed by Victoria staff with the exception of the species lists. It will be posted to a site on the internet shortly and the link sent to FER and Area Supervisors. It will not be generally available to the public until the edits are incorporated and the species lists completed.

#### F. Clarification of Provincial Policy on Marine Protected Areas

##### Question 7. What is provincial policy on Marine Protected Areas (MPA)?

**Discussion.** The 1997 BC Marine System Management Policies are on the web at: [http://www.env.gov.bc.ca/bcparks/conserve/cpp\\_p1/marine.pdf](http://www.env.gov.bc.ca/bcparks/conserve/cpp_p1/marine.pdf). There are also a series of letters to DFO requesting complementary fisheries closures for ERs. Doug Biffard is the MOE contact on the DFO MPA committee. Doug has advocated protection of the water column to improve the protection of Parks and Protected Areas including ERs as the MOE member of this committee.

**Follow-up.** Greater clarification was obtained through



Whether or not you consider marine mammals to be a valuable part of an ecosystem, we have the unique opportunity of having an island (Race Rocks) close to a major population centre which is a haulout habitat for five marine mammal species and a birthing habitat for three of those species. This is unique in Canada, and it is our responsibility to maintain that ecological integrity of the location as much as possible. The purpose of this ecological reserve is to protect as far as possible the entire ecosystem, including the seabirds, mammals, marine invertebrates, fish and algae. The above image is an example of the results of what we might call "Anthropogenic" or human caused disturbances from encounters of animals with motor boats. These are only the ones we see and document. No one knows what goes undocumented. Safe boating practises and speed reduction are needed in all areas around bird and mammal colonies.

attendance on the MPA public advisory committee for Race Rocks. See article on Race Rocks Marine Protected Areas. (page 10)

#### G. Access Ecological Baseline Data and ER-Specific Conservation Assessments

##### Question 8. What is the system now in place on botanical and biological baselines and conservation assessments? Can FER have access to Parks information on ERs?

**Discussion.** The desire is to look at existing baseline information and how FER and ER wardens can add to this. Tory indicated MOE has an electronic database that is accessible by

internet, called the Special Features database and is part of the Conservation Risk Assessment. It lists the red and blue-listed species, other biotic features, abiotic features and cultural features (anthropic). It is set up so that people with permission can read, edit or add to it. Doug and Tory Stevens are the FER contacts for permission to access the MOE ER data base.

**Follow-up:** MOE will provide access to the MOE database to FER members and wardens who wish to review this data.

Visit our website at:  
[www.ecoreserves.bc.ca](http://www.ecoreserves.bc.ca)

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## Flotsam and Jetsam....

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**Y**ou may notice that this edition of the LOG combines the Autumn and the Winter issues and we are planning a Spring/Summer edition. Two LOGS a year will help FER save publishing dollars.

On that note, if you would like us to not only save money, but save a few trees, we are offering to provide a copy of the LOG electronically to those members who are interested. A colour pdf version of the LOG would be emailed directly to you. Please check the box on the membership form in this edition and forward it to us to activate this change.

As we are not publishing another LOG until the Spring, we will be sending out the information concerning our Annual General

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**Friends of Ecological Reserves would like to take this opportunity to thank Mike Robinson for not only ensuring Trial Island Ecological Reserve is kept free of plastics and other garbage, but for writing the article which appears on page 6. We hope it will make people more aware of this critical problem.**

Meeting and our planned field trip to Trial Island to our mailing list as soon as the details are finalized. We will send out these notices by post and by email as well as include it on our website.

The Friends of Ecological Reserves autumn trip to Race Rocks was fraught with difficulties this year. The original trip date of September 20 was postponed because the boat used to take visitors to the ER was laid up. The trip was re-scheduled to October 25th, but poor weather conditions scuttled the trip for this year.

**Wardens, please help FER track and share your knowledge and legacy. We are putting out the appeal once again for any information that you may have on your ERs. Please send us images, written observations, surveys and copies of your warden's reports to MOE. We are happy to have paper as well as electronic copies. We really want to build ER-specific notes. For examples of what we have so far, please visit: <http://www.ecoreserves.bc.ca/fieldnotes.html>. We need your help!**

# The Log



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