



Spring 2009

## FRIENDS OF ECOLOGICAL RESERVES NEWSLETTER

### President's Report

By Mike Fenger

The Annual General Meeting is a good opportunity to reflect on our accomplishments and set some goals for the future. We were extremely fortunate to have Briony Penn (one of the FER elders) and Krista Roessingh provide the public lecture at this year's AGM. Krista has also written an article on her sandhill crane studies (see page 3 in this LOG). We were also fortunate this year to have Eva Riccius from the Ministry of Environment attend and participate in our AGM.

What is the purpose of Ecological Reserves? The Ecological Reserves legislation states that it is to protect examples of representative and unique ecosystems of British Columbia and to have these serve as natural benchmarks, research areas, educational resources and repositories of genetic materials and geologic features. 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.

The Friends of Ecological Reserves is a three-decade old volunteer organization working with the Ministry of Environment. Our Mission statement is: "to support the role of Ecological Reserves in furthering understanding of natural processes and human interactions in ecosystems".

The FER Strategic Plan provides a convenient framework for a year in review and some thoughts for the year ahead.

#### FER activities March 2008 to March 2009 and possible directions for 2009 - 2010

**Goal 1:** To support the protection and management of a strong Ecological Reserve System through a *strong warden program*, systematic

Continued on page 2

### Inside ...

President's Report (Cont'd.) 2, 10 & 11

Sandhill Cranes of the North and Central B.C. Coast 3, 4, 6, 8 & 9

Spilled Oil Caught as Truck Salvaged 5

Entangled Whale Freed At Sea 7

Mount Maxwell Day Trip 9, 12 & 14

Victoria's Owl-clover Found on Trial Island Field Trip 13 & 14

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



# The Log

Spring 2009

*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 Autumn issue of *The LOG* is September, 2008.

#### Editor

Louise Beinhauer

Design and Production

L.B. Word Works

#### Directors

Mike Fenger, President

Tom Gillespie, Treasurer and Membership

Secretary

Marilyn Lambert

Mary Rannie

Stephen Ruttan

Garry Fletcher

Wynne Miles

Don Eastman, Past President

#### Honorary Directors

Bristol Foster

Robert Bateman

Trudy Chatwin

Vicky Husband

Josette Weir

#### Contributors to this issue:

Mike Fenger, Marilyn Lambert, Stephen Ruttan, Paul Linton and Krista Roessingh

Memberships are based on a calendar year.

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

Students/Seniors: \$15

Charitable BIN # 118914597RR

FRIENDS OF ECOLOGICAL RESERVES

PO BOX 8477 STN CENTRAL

VICTORIA, BC V8W 3S1

Email: [ecoreserves@hotmail.com](mailto:ecoreserves@hotmail.com)

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

Canada Post Agreement No: 40020740

## President's Report (Cont'd.)

inventory and monitoring, timely assessment of reserves and an effective government presence, especially where ERs are most at risk.

- ▶ FER has set as a long term goal to have a volunteer warden for each of the 147 Ecological Reserves. There have been some recent recruitment of wardens by the Ministry of Environment. Volunteers from the Rocky Mountain Naturalists have taken on warden duties for Columbia Lake ER 20, Mount Sabine ER 19, Ram Creek ER 26, Gilnockie ER 104 and they will be working with BC Parks staff Brett Yeats (see Spring 2008 LOG). This is an extremely good way to supplement MOE staff, as there are quite a few volunteers within the Naturalist club and thereby they are more likely to provide numerous site visits and reports to MOE. We hope a club approach is used in other ERs.
- ▶ The Board met with Scott Benton, Brian Bawtinheimer and Eva Riccius of Parks, which led to improvements to the MOE web page on the process for Warden Recruitment (see Winter LOG 2009). We are clearly supporting MOE but not leading. Eva Riccius has been identified as the FER contact person in headquarters. We are very pleased to have someone identified to help coordinate our efforts within the Ministry.
- ▶ FER maintains a data base of

ER wardens and members for the purposes of mailing out the LOG. The FER board encourages wardens to provide reports that can be added to FER web pages as well as help build a corporate FER data base. Thank you Malcolm Martin for supplying information on the 1988 survey of Vance Creek ER 30 and also ecosystem maps of the Cougar Canyon ER 108. We know there is a great deal more information in the heads and files of wardens and we strongly encourage them to send this to us (Tom Gillespie our web manager). We will add your data to the FER data base and make this information web available.

- ▶ We rely on MOE for information on warden recruitment and changes in wardens. This means the FER warden list is sometimes not up to date. Improvements are planned.

### Possible directions for 2009 - 2010 (Subject to Board discussions)

- ▶ Work more closely with Eva Riccius to ensure there is excellent communication which is critical for coordination of wardens and sharing of information.
- ▶ Information received from wardens is being posted by Tom Gillespie who has taken on the duties of web master. Wardens, please send us your information. In addition to your warden's

*Continued on page 10*

---

# Sandhill Cranes of the North and Central B.C. Coast: Some Natural History

By Krista Roessingh

---

Imagine paddling along a calm inlet with rocky beaches covered in golden rockweed, where lichen-shrouded hemlock, spruce, and cedar lean their boughs over the shore. The air is misty wet, the sky hung low with clouds, and the smell of cold, clean seawater drips from your paddle blades onto your clothes.

Coming around a bend the shoreline opens up at a small estuary. There is a creek running out from the forest and over an ancient fish trap, with sedges and silverweed blanketing its banks. Some days you might see a wolf or a black bear and her cub here among the sedges.

Today on the far shore of the creek, two red and white heads pop up from the little meadow, already watching you. After a moment, one long grey neck goes down and pecks at something, and then the other, as they continue to warily feed in the rockweed.

Eventually the current carries you too close, and the large birds turn their grey bustles toward the forest edge and move stiffly up the beach. Above the high-tide line, they blend perfectly with greyed driftwood cedar logs and boulders while they wait and watch, occasionally nibbling a salal berry from the overhanging forest.

Suddenly, from somewhere beyond the forest you hear a primordial call. An echoing rattling bugle sound breaks the



Sandhill crane. Photo by Ingmar Lee, 2007

stillness of the scene and comes closer until you see a line of four sandhill cranes with necks outstretched, their wingtips arcing with graceful quick upbeats. They circle over the water and glide down to the beach with legs dangling, landing noisily on the other side of the creek from the pair of cranes, who respond with loud, perturbed calls.

These cranes are part of a small population that mainly breeds and summers in the archipelago of the Hecate Lowlands Ecoregion, on the central and north coasts of British Columbia and on the southeast coast of Alaska. They occur in low densities, clustered in areas where there is a confluence of productive estuaries and sheltered beaches, upland bog with small pools, and old-growth

forest in between. They are thought to belong to the *rowani* subspecies, which is intermediate in size between the lesser (*canadensis*) and greater (*tabida*) migratory sandhill cranes.

Based on recent telemetry studies conducted by Gary Ivey of the International Crane Foundation and others, many coastal breeding cranes stage in the Lower Columbia River area, and winter in the Central Valley of California with other cranes from the Pacific Flyway Population. Most cranes belonging to this larger population (approximately 25,000 cranes) actually use an interior route through northern B.C. on their way to their boreal and tundra breeding grounds.

Prior to 2006, there was very

*Continued on page 4*



Two sandhill cranes forage along the beach. Photo by Krista Roessingh, 2008

little knowledge of crane habitats in this area. The inner and outer islands of the central and north coast are mostly unroaded and uninhabited, accessible only by water or by air.

Biologist Ian McTaggart-Cowan and naturalist/collector Tom McCabe observed sandhill cranes on the outer islands of the central coast in 1928, and noted their unusual use of forest trails and bog nesting habitat.

From 2006-2008, we conducted helicopter surveys of high probability habitat, mainly on the central coast, in May, when cranes are nesting. These surveys were guided by local knowledge of crane locales gathered from mariners and naturalists.

In 2007 we followed up on aerial crane sightings by boat and on foot in order to identify more nest and roost sites, and in 2008 we conducted nest habitat and diet studies using a subset of these sites.

Over three field seasons, we located 29 nest sites on 14 different islands and one mainland peninsula, as well as

several beach foraging areas and bog roost sites. In 2008, the average nest density was 0.044/km<sup>2</sup>, and the average crane density was 0.22/km<sup>2</sup> for the nests and cranes located over an area of 430 km<sup>2</sup>. Nest and roost sites were found within 1.25 km of the shoreline, on the inner and outer islands between 51°50' and 54°00'N where blanket mire complexes occur. It is very likely that crane nests occur further inland, but our survey transects generally covered a 1 km strip along the coastline because most of the sightings we knew of were made from the water.

The nests were typically in small (under 2.0 ha) pools in small basins dotted with mossy islets that provide perfect nest platforms, safe from flooding and terrestrial predators. Water in these nest pools was an average of 0.63 m (+/- 0.056 m) deep and mucky. The pools are formed by decomposing peat moss in ombrotrophic peatlands, and are part of the coastal blanket mire complex.

The blanket mire complex is a

# CALENDAR

**July 16 - 18, 2009**

**2009 Botany BC**

This year's Botany BC is centered out of Muncho Lake in the northeast corner of B.C. For information on the program and registration, visit: [www.ou.edu/cas/botany-micro/ben/](http://www.ou.edu/cas/botany-micro/ben/)

**September 20 – 10:00 am to 1:00 pm**

**FER Field Trip to Race Rocks**

Meet at the 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.

mosaic of bog woodland, open bog, drier forest and scrub forest site series. The vegetation around most nest sites is dominated by shore pine, red and yellow cedar, sweet gale, Labrador tea, coastal reindeer lichen, and *Sphagnum* mosses.

Most nests were not well concealed by vegetation; it seems more important for incubating cranes to be able to see approaching danger than to be hidden. However the average nest pool was within 100 m of forest cover over 10 m high, providing both isolation and cover for nesting cranes and their young.

The diet of 5 pairs of breeding

*Continued on page 6*

---

# Spilled Oil Caught as Truck Salvaged

By Judith Lavoie

Excerpted from the May 22, 2009 edition of the *Times Colonist*

---

A specially designed metal jacket wrapped around a fuel truck that has sat on the ocean floor for almost two years in an environmentally sensitive area is believed to have captured almost all of the oil that spilled as the truck was lifted this week.

“It was entirely anticipated that would happen and that’s why the jacket was there,” said Randy Alexander, environmental protection manager for the Environment Ministry.

Oil is lighter than water, so it floated to the top of the deep-water-recovery container belonging to Netherlands-based Momoet Salvage B.V., which conducted the salvage of the tanker truck and a metal cube containing barrels of hydraulic oil.

They are among 11 pieces of equipment that slipped off a barge into Robson Bight Ecological Reserve in August 2007.

The container, fuel truck and oil cube were returned to New Westminster, where the amount of oil that escaped into the jacket will be assessed. The fuel and hydraulic oil will then be pumped into a vacuum truck and recycled.

The day before the recovery, when the truck wheels were pulled out of the mud 350 metres below the surface, a small amount of oil leaked out, but most was caught by booms and absorbent mats. “It was a burp of a couple of litres and it was collected on the surface,” Alexander said.

But it was a scary moment for observers who saw fuel rise to the surface and wondered if the tanker, carrying up to 10,000 litres of diesel, had ruptured, said Oonagh O’Connor of the Living Oceans Society.

It’s now believed the fuel might have come from the truck’s fuel tanks, she said. “If that’s the only incident, that’s amazing.”

Living Oceans is asking Transport Canada for rule changes to make barge traffic safer, and for an immediate halt to commercial shipping through the fragile ecological reserve, said O’Connor, adding barge cargo should be tied down. “We have 100,000 barge movements on the B.C. coast each year and no requirement for tying down. You get substances like barrels of hydrochloric acid just sitting on barges.”

Living Oceans also wants mandatory inspections of barges to ensure they are seaworthy.

The recovery inadvertently offered a window into the workings of the provincial government’s Public Affairs Bureau when a news release included an e-mail between two communications staffers. “Think the background info should be simplified and not mention the leak of some oil — raises new questions. Should just offer the basics — how it was lifted, that it was successful and next steps. Not budget either — they can call about

those details if they chose (sic),” it says.

Environment Ministry spokeswoman Kate Thompson said the inclusion of the e-mail was inadvertent, but none of the information was secret.

The budget for the recovery operation was set at \$2.5 million, but will probably come in at about \$2 million, she said.

Government is still hoping to recoup some of the operation’s cost from Ted LeRoy Trucking of Chemainus, which owns the equipment, but the company has declared bankruptcy.

Charges have been laid against LeRoy Trucking and Gowlland Towing of Campbell River.

*Paul Cottrell, the DFO acting marine mammal coordinator was in Robson Bight ensuring there were no whales around as salvage crews recovered the sunken fuel truck. Coincidentally, a humpback whale in distress was reported just 45 minutes away. Please see story on page 7.*

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



cranes in the Bella Bella area (from fecal analysis) was composed mainly of perwinkles and small mussels foraged from the rockweed zone of the lower intertidal, sedges from the upper intertidal and salt marshes, and crowberries from the bog woodland and open bog.

This year we watched a pair of nesting cranes with an unmanned remote camera system. Footage was transmitted to a receiving computer over 3 km away, from where we controlled the camera with pan, zoom and record functions. The pair took turns caring for their two eggs, switching off at least twice a day but never leaving the eggs unattended for more than a few moments. The incubation period is 28-32 days.

This pair nested in exactly the same spot last year; a 3 m<sup>2</sup> tussock of *Sphagnum* and lichens in a larger pool dotted with approximately 70 islets of varying sizes, in a rolling bog complex on a small island near Bella Bella. In 2006 and 2007, they nested in a smaller pool in the same complex.

Cranes mate for life, but do not breed successfully until they are 2-7 years old. They may lay 1-3 eggs each year (normally two) but usually only one chick will survive to fledging.

We witnessed both eggs hatching via the remote camera, the first one on the evening of June 2nd and the second one on the following morning. Before the chicks could even hold themselves erect the older sibling was attacking the younger one. Both parents were



Crane nest after hatching. Photo by Ingmar Lee, 2008

present for the hatching of the second egg, and soon afterwards the female led the older chick away to the edge of the pool. Only 18 hours old, the tawny little chick could already swim! Within another two hours the male left the nest to join the others at the pool edge, only about 3 m from the nest islet. The second chick was not strong enough yet to swim the distance and we did not see it again.

The family roosted and

brooded in another part of the pool overnight but left the next morning and did not return the next night. The remote camera project provides a fascinating window into nesting behaviour, which we have been able to share with students at local schools.

Over the next 3 months, the chick must grow large and strong enough to fly south with its parents. During the

*Continued on page 8*

---

# Entangled Whale Freed at Sea

Humpback gets rare reprieve as marine mammal expert nearby

By Lindsay Kines

Excerpted from the May 20, 2009 edition of the *Times Colonist*

---

Whales don't catch many breaks these days. They face a threatened food supply, pesky boat traffic and the build-up of PCBs and other toxins in their bodies.

So it's worth noting that one whale received a rare reprieve this week after getting entangled in another man-made hazard – prawn traps in Knight Inlet just east of Port McNeill.

By chance, a Department of Fisheries and Oceans official with training in how to disentangle whales from nets and other gear happened to be just 45 minutes away.

Paul Cottrell, the department's acting marine mammal co-ordinator, was in Robson Bight, ensuring there were no whales around as salvage crews tried to recover a sunken fuel truck with 10,000 litres of diesel aboard. (see story on page 5)

"It's incredible we were on the water, we had the expertise there," he said. "So it was a little bit fortuitous."

Cottrell said a fisherman called Monday to report a whale in distress, so the marine mammal expert zipped over to the remote inlet along with fisheries officers, the crew of the Canadian Coast Guard vessel Sooke Post, and members of the Cetus Research and Conservation Society's



A juvenile humpback whale was entangled in prawn traps in Knight Inlet before being freed by rescuers.

Straitwatch program. Once there, the rescuers found an entangled juvenile humpback whale, which is a threatened species in Canada.

Doug Sandilands of Straitwatch said the whale likely got a rope stuck in its mouth Sunday evening or early Monday and was dragging about a dozen prawn traps. "Once it's in its mouth it is really hard for it," he said. "It almost never comes out on its own."

Rescuers attached a buoy to the whale to slow it down and used special dis-entanglement gear — flown in by float plane — to remove all but two of the traps before nightfall.

Cottrell and some of the team then spent a restless night aboard the Sooke Post, hoping they'd be able to find the whale again in the morning.

"If an animal has just a little bit of line... in its mouth, it can stay there for years and rub and rub and cause infection and damage to the animal and eventually kill the animal," he said.

Cottrell and the team were up at 4 a.m. yesterday and on the water before light. They finally spotted the whale at 7:30 a.m. — 18 nautical miles from where they had last left it — and managed to cut away the remaining rope and traps.

"It was," Cottrell said, "an exhilarating feeling." Sandilands said the humpback will likely live a normal life now.

"It was really fortunate that the fisherman called in so quickly, he said. "That was really great of him to do that. Sometimes the fishermen feel bad about it and don't report it to the coast guard. The fact that this guy did saved that whale's life probably."

Anyone spotting whales or other marine mammals in distress can call 1-800-465-4336.

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

incubation period, we witnessed crows and Stellar's jays divebombing the cranes on the nest, but no other predation attempts. Now the chick is much more susceptible to predation. Both parents will stay close to guard it, leading it on foot through the forest to a nearby marsh and to the beach to feed. Potential predators in this area include mink, eagles, ravens and wolves.

Other dangers threatening this population of cranes include massive wind farm developments proposed for several outer coastal islands where they nest, logging, and potential oil spills from passing tankers. Although wind farms are considered a form of green energy, they have a large footprint and their impacts to birds and to bogs can be detrimental.

Overland transmission lines also pose a threat to birds. The outer coastal locations where the windfarms are planned have seen little or no human development and are home to large intact estuary and lagoon systems, salmon runs, elusive coastal wolves, and the unique flora associated with the coastal blanket mire complex. The wind farm proposal that is in the latest stage of development is for the northwest end of Banks Island on the north coast, inside a newly designated conservancy area.

All the nest sites and several roost sites we located on crown land not in conservancy or protected areas, have been proposed for Wildlife Habitat Areas, under the Identified Wildlife Management Strategy



Sandhill crane chick. Photo by Krista Roessingh, 2008

(IWMS) for sandhill cranes. Each of these WHAs can include a maximum of 20 ha of operable timber, and are protected from logging and range activities but not from other forms of industrial activity.

The IWMS calls for research on the impact of logging on breeding sandhill cranes, and the determination of appropriate buffer widths for nest sites, however we have not found any nests close to logging.

The largest threat to all wildlife and ecosystems connected to the coast is the potential for an oil spill, especially if the planned Enbridge Gateway pipeline project proceeds. This massive project will deliver crude oil from Alberta's tarsands to Kitimat's port, and condensate arriving on tankers from Asia will flow the other way in a twin pipeline. There is no way to mitigate an oil spill, and this wild and rocky coast poses some of the most challenging navigation

conditions in the world for ships both large and small.

The cranes' wintering grounds in the western U.S., which are mostly wet agricultural areas, are under pressure due to conversion of farmland from grain crops to vineyards and orchard fruit, and from water diversion projects.

Most populations of migratory sandhill cranes in North America have recovered dramatically from overhunting in the 19th and early 20th centuries, which saw their numbers decimated by approximately 95%. However, little is known about the status and distribution of cranes in B.C., and much of their breeding habitat remains unprotected. Therefore it seems strange they have recently been down-listed from vulnerable to not-at-risk status by the Conservation Data Centre. The coastal population is speculatively estimated to

number 4,000 birds, making it one of the smallest populations of migratory sandhill cranes on the continent.

For visitors to the coast, the sight of sandhill cranes foraging on beaches is amazing. Their size and wariness during the breeding season make them fascinating to observe. Small flocks of non-breeders gather on beaches and in estuaries, occasionally squabbling or chatting in low rattle calls.

Breeding cranes bring their young chicks down to the shore to feed and to practice flying, hiding them in the tall sedges when approached. The nests remain isolated and unknown to most people, as the upland bogs, hidden behind a fringe of tangled forest cloaking the shoreline, are rarely visited.

We feel it is important to continue inventory work on the coastal cranes and we continue to advocate for protection of ecosystems included in their breeding habitat, which is home to many other species as well.

*The Coastal Sandhill Crane Project was initiated by the Raincoast Conservation Foundation and the North American Crane Working Group of the International Crane Foundation, and has received support from the National Science and Engineering Research Council, the Ministry of Environment Ecosystems Branch, and MITACS ACCELERATE BC Industrial Internship Program. The remote camera project is an initiative of Pacific Wild. For more information, photos, and footage, please see:*

*[www.rainforestsandhillcrane.wordpress.com](http://www.rainforestsandhillcrane.wordpress.com) and [www.pacificwild.org](http://www.pacificwild.org).*

## Mount Maxwell Day Trip

By Mike Fenger, Marilyn Lambert, Stephen Ruttan and Paul Linton

On May 3<sup>rd</sup> three of the FER Board visited Paul Linton and the Mount Maxwell ER.

### Background

In 1972, a 65-hectare parcel of land was preserved under the *Ecological Reserve Act* establishing Mount Maxwell Ecological Reserve. In 2001, The Nature Trust [TNT] acquired 280 hectares of land adjacent to Mount Maxwell Ecological Reserve, and leased it to the province. The TNT land and an additional 45 hectares of land were added to the ecological reserve in 2004 increasing the size to 390 hectares.

A map and legend of the ecosystems of Mount Maxwell can be accessed at:

[www.env.gov.bc.ca/bcparks/planning/mgmtplns/saltspring/mt\\_max\\_er.pdf](http://www.env.gov.bc.ca/bcparks/planning/mgmtplns/saltspring/mt_max_er.pdf)

### Issues of Concern

Extensive opportunities for research in the ecological reserve have been identified. Prioritizing and scoping financial requirements for implementing management activities (e.g. undertaking invasive species removal, maintaining Garry oak meadow, eliminating grazing by feral

*Continued on page 12*



View from upper elevations of ER towards Sansum Narrows.

reports, we also welcome information from regional offices on specific ERs that would help add to the information already assembled for ecological/biological baselines.

**Goal 2.** To support the *study of ecological* reserves that builds understanding of ecosystem resiliency, ecological processes and natural elements.

- ▶ We provided bridge financing for the Vicky Husband Scholarship which is now set up as a trust.
- ▶ As an NGO, FER provides tax receipts to third parties who support natural areas research.
- ▶ We received one request for research funding. We reviewed the request and since it was not directly related to ERs, declined the request.

**Possible directions for 2009 - 2010 (Subject to Board discussions)**

- ▶ Consolidate the existing information on specific ERs.
- ▶ Continue to seek funding to support research in ERs and to advocate academic institutions and students' focus on ERs in order to build knowledge.

**Goal 3.** To support the development of a resilient and *enduring science-based ecological reserve system*.

- ▶ A potential new ER within the Spatsizi Park and near Gladys Lake ER has been recommended to the Regional Manager in Skeena and appears one



Krista Roessingh (left) and Briony Penn – guest speakers at the FER 2009 AGM.

step closer to formation after a three-year process. We featured this proposal in the Autumn 2007 and the Spring 2008 LOG. The area identified is a much-used low elevation mineral lick and is well suited to the ER designation. Support from area residents, guide outfitters and FER means this ER proposal has been recommended and is now with the Parks regional manager.

- ▶ Potential options for a new ER in honour of Bert Brink were pursued. The Ministry of Environment designated 915 hectares of important fish and wildlife habitat located just west of Chilliwack and a further 71 hectares in south Surrey as a wildlife management area named after Bert Brink; also a fitting tribute.

**Possible directions for 2009 - 2010 (Subject to Board discussions)**

- ▶ FER has relied on the State of ER report and worked to implement recommendations from this report over the last three years. Climate change has become a more significant factor in our understanding and there are questions as to the vulnerability of existing ERs. FER will need to work closely with MOE and other NGOs to assess the vulnerability of Ecological Reserves.
- ▶ An ER vulnerability assessment would ideally include gaps and assessment of ERs that were proposed but not designated while the ER program was in existence.
- ▶ The need for Ecological Reserves that maintain

Continued on page 11

representative ecosystems, is still vitally important. We will continue to press government for representative ecosystems such as those identified in the "Sustainable Forestry Benchmarks for British Columbia". This FORREX report was supported by the Friends' Board and was used as the basis for a submission for funds to establish a network of natural research watersheds in BC. This publication shows the current gaps and limitations of the ecological reserve system especially in the interior plateau, and links the need for monitoring and for new reserves, to both climate change and mountain pine beetle forest disturbance. The proposal to initiate implementation of recommendations for watershed level monitoring between provincial and federal agencies was unsuccessful.

- ▶ Review and restructure the use of our "Science Advisory committee".
- ▶ Expect that FER will need to advocate and show support for Marine Protected Areas linked initially to existing ERs.

**Goal 4.** To raise *awareness* of the value of ecological reserves among targeted groups, including: local and provincial elected officials; public servants; neighbours of ecological reserves; and the conservation community.

- ▶ Being involved with other

like-minded organizations on protection and management of natural areas is seen as a real boost to this small organization. Never has the need for strategic long-term thinking over natural areas been greater. This is especially true in light of climate change.

**Possible directions for 2009 - 2010 (Subject to Board discussions)**

- ▶ Seek partners and funding to establish benchmarks where needed and to begin monitoring of benchmarks within the protected areas system.
- ▶ Continue to participate with other like-minded NGOs such as the Parks Elders Council and CPAWS on areas of mutual benefit.
- ▶ Advocate that MOE finish the Guide to ERs. This has been under internal assessment for over a year.

**Goal 5** To sustain a nurturing and effective *organization* that supports the maintenance and development of ecological reserves and the concepts

underpinning them.

- ▶ Field trips, open to the public and helpful to recruit new members, were made to Trial Island and Race Rocks. Thanks to Garry Fletcher, Marilyn Lambert and Mary Rannie for being the main organizers of these events. Marilyn Lambert, Stephen Ruttan, and Mike Fenger spent a day with Paul Linton on Mount Maxwell and got better insight on management of this ER. See page 9 in this Log.

**Possible directions for 2009 - 2010 (Subject to Board discussions)**

- ▶ Our major funders for research have indicated they are no longer able to support their selected projects. This leaves a very limited scope supporting ER research.
- ▶ We will look at ways to expand membership to ensure long term viability and cover operating costs. (See Budget below)

<b>FER 2009 Budget</b>			
<b>Projected Income 2009</b>		<b>Projected Expenses 2009</b>	
Membership	2,000.00	Office Expenses	200.00
Donations	2,000.00	Admin	3,840.00
Interest from bank acct.	360.00	The Log	3,000.00
Lichen Foundation		Research Grants given	
Luna Trust		Scholarship	
Field Trips	300.00	Field Trips	150.00
Placemat Sales	1,000.00	Website & Education	100.00
Meadowlark Print		Wardens' meetings	
UVic Scholarship Grant			
Provincial Gov't.			
<b>Total</b>	<b>5,660.00</b>	<b>Total</b>	<b>7,290.00</b>
		Projected Short Fall	1,630.00

livestock, and impacts of long term fire suppression) is required.

### Management Directions (from MOE web site)

BC Parks has limited resources to undertake research and management in this Reserve. BC Parks will seek to identify partnerships to assist in the completion of research and monitoring projects over the next 5-10 years. This might best suit participation by a post-secondary school, working with the Garry Oak Ecosystem Recovery Team and funding organizations.

- Continue to minimize access: de-commission unsanctioned trails; reroute trails that pass peripherally through the reserve; monitor and enforcement along shoreline to control



Paul Linton, Mike Fenger, Marilyn Lambert and Stephen Ruttan (the crew)

- camping in the reserve.
- Establish clear information for reserve boundaries. Investigate options for

providing the public with opportunities to learn about the reserve's special values, e.g. videos, books, brochures, signs, viewpoints, etc.

- Continued removal of feral sheep.
- Initiate a program for active removal of invasive species, with focus on the restoration of the Garry oak ecosystems.

### Our Visit

We were met by Paul Linton, the long time ER warden in this reserve. Paul was happy to report that there have been no feral sheep observed in the ER over the last two years. This ends approximately 136 years of sheep grazing from these ecosystems. There are still 26 feral sheep affecting the Mount Tuam ER.

Spring was well underway at the lower elevations and the oaks were in leaf in Victoria but not in the upper portions of this



Gray's desert-parsley (*Lomatium grayi*) was likely protected by fencing as well as growing on a steep slope.

Continued on page 14

# Victoria's Owl-clover Found on Trial Island Field Trip

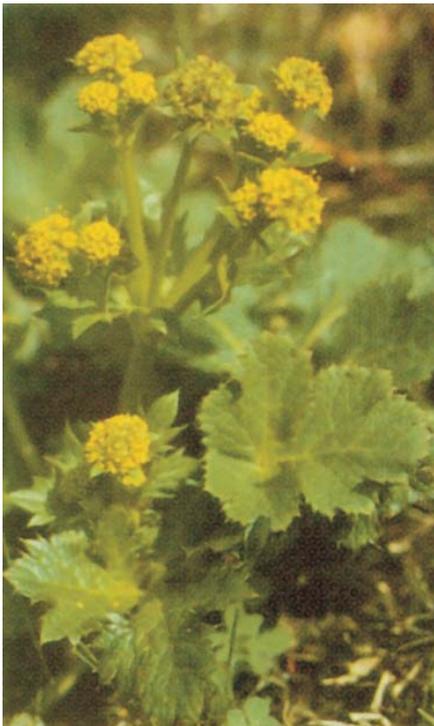
By Marilyn Lambert

After a night of howling winds, the day we picked for this year's Trial Island trip dawned bright, sunny and, most importantly, calm!

Our usual trip leaders, Adolf and Oluna Ceska, weren't available this day, so we were fortunate to have Trial Island Ecological Reserve warden, Matt Fairbarns share his views on the rare flora of this lovely island with us.

Over the years, Matt and his crew of invasive plant bashers have removed a ton of broom, ivy and other invaders from the island. The result of all this work showed in the wonderful fields of camas, some of which had previously been covered in broom.

Our old favourites, Golden paintbrush and Bearpaw sanicle



Bearpaw sanicle (*Sanicula arctopoides*)



Trial Islands Field Trip Participants enjoy sunshine and wild flowers.

were in full bloom, as were lots of other flowers too. We saw naked broomrape poking their purple heads out from spring gold. This plant parasitizes other plants such as stonecrop, but in places on Trial Island it is found among the spring gold. Matt showed us an area where virtually nothing was growing as the Canada Geese had moved in. It was quite a shock to see how destructive these birds can be



Golden paintbrush (*Castilleja levisecta*)

on the vegetation.

As we continued our journey around the island, Matt regaled us with stories of his botanical exploits, both on Trial Island and other special places around southern Vancouver Island. At one point he was very excited to show us a special little plant called Victoria's owl-clover that he recently described as a new species. Matt says:

"Victoria's owl-clover is a small, annual wildflower of vernal pools and seeps. Botanists first collected specimens of this plant over a century ago and struggled to identify them until it was recently shown to be a unique undescribed species. It occurs nowhere in the world apart from the Victoria area and the San Juan Islands. It has disappeared from some of the

*Continued on page 14*



Trial Island ER warden, Matt Fairbarns holds up a sample of Victoria's owl-clover.

sites where it had been collected over the years and it is now known from only three places in the world. Almost the entire global population occurs on Trial Island. There are several other species of owl-clover in Victoria. They are closely related to Indian paintbrushes but have an annual rather than perennial life history and tend to be

much smaller."

The Friends of Ecological Reserves is fortunate to be able to provide this annual outing to members so they can enjoy and learn about the rare plants on Trial Island Ecological Reserve. We thank Matt for his passionate and interesting tour of the island this year. Thanks also to Phil Lambert and Don Mais for providing safe transportation to the island.

ER. This has been a late spring. There was a considerable amount of paint ball activity at the upper edge of the reserve and evidence on the trees and on the ground. Paul has discussed this with some of the local paint ball enthusiasts with mixed results.

We all owe a big thanks to Paul Linton who continues to be the watchdog for this ER as well as Mount Tuam ER. As this goes to press, Paul is heading to Mount Maxwell ER to see if the recent 7 hectare fire has affected the ER.



This violet (*Viola praemosa*) is suffering from competition with rose campion (*Lychnis coronaria*) that is increasing in the Mt. Maxwell Ecological Reserve. Paul Linton, the ER warden, has a few spots that he is monitoring annually by marking individual occurrences and counting the total.

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



# FRIENDS OF ECOLOGICAL RESERVES MEMBERSHIP FORM

Box 8477 Stn Central, Victoria, BC V8W 3S1

Renewal for 2009                       New membership

*Membership Category*

Individual: \$20             Student/Senior: \$15             Family: \$25             Institution: \$25

NAME (please print) \_\_\_\_\_ Date \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_ Postal Code \_\_\_\_\_

PHONE (\_\_\_\_) \_\_\_\_\_ E-Mail \_\_\_\_\_

I/we enclose Payment for:  
 \_\_\_\_ year(s) membership                      \$ \_\_\_\_\_  
 Donation    \$ \_\_\_\_\_  
 \_\_\_\_ copy(ies) Constitution & Bylaws @ \$1 each    \$ \_\_\_\_\_  
**TOTAL ENCLOSED:**                                      \$ \_\_\_\_\_

Tax receipts issued for donations of \$20 or more  
 (Charitable BIN#118914597RR)

**I am interested in volunteering for:**

Assisting with Field Trip organization  
 Contributing articles/photos to *The LOG*  
 Fund-Raising     Telephoning     Other

**Please apply my donation to:**

Land acquisition projects  
 Scholarships for post-graduate research  
 Where most needed

## ORDER FORM FOR PLACEMATS

**Placemats – \$5.00 each**

Interior Grasslands • Douglas Fir • Garry Oak • Alpine Flowers

\* Non-profit Group Volume Discount (10 or more) \$4.00 each

Name (please print) \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_ Postal Code \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_ E-mail \_\_\_\_\_



DESCRIPTION	UNIT PRICE	TOTAL

Shipping, Handling and Postage for Placemat Orders \_\_\_\_\_ \$4.00

**Total Enclosed** (Cheque or Money Order) \_\_\_\_\_ \$ \_\_\_\_\_

---

## Just so you know....

Paul Linton, Mt. Maxwell ER warden, took this picture June 16, 2009. As you can see, the recent fire on Mount Maxwell did impact the Ecological Reserve. This offers an excellent opportunity to carry out a regeneration study of this burn area.



# The Log



Friends of Ecological  
Reserves  
PO Box 8477 Stn Central  
Victoria, BC V8W 3S1

**Email:**  
ecoreserves@hotmail.com

**Website:**  
www.ecoreserves.bc.ca  
Charitable Tax#  
118914597RR

Printed on recycled paper.



Please share and/or recycle.

---

Return Address



Friends of  
Ecological Reserves  
PO Box 8477  
Stn Central  
Victoria, BC  
V8W 3S1

Canadian Publications Mail  
Agreement No. 40020740