



President's Message

by Alexandra Mancini

As you'll see from the side bar, part of the Society's mandate is to support the development of biological zones near the boundaries of Lighthouse Park. At our A.G.M. in 2006 we decided to extend our stewardship to five neighbouring parks, Caulfeild, The Dale, North Piccadilly, Trails and Klootchman. Along with Lighthouse Park itself, these wooded areas became the Six-Park Network. We have put together a report on these smaller parks, describing their natural and cultural heritage as well as the conservation opportunities they offer. This spring, we shall present this report to the Mayor and Council along with requests regarding issues that have arisen in our attempts to conserve this valuable natural network.

As Caulfeild Park is the most biologically diverse of these smaller parks, we gave it particular attention in the report, and last year we focused our efforts there. At four events, with the help of neighbors and youth groups, we tackled a central section that had become completely overrun with invasive species. As we cleared away the dense growth, we revealed the location of the pilot house and the garden that had once occupied this beautiful spot. Along with blackberry and ivy, the main non-native invasive species in the area are laburnums. These small trees have been seeding themselves vigorously throughout the area. While continuing to clear invasive species with the help of the Parks Department, we plan to begin restoration this year using native trees such as shore pine, arbutus, Saskatoon and western dogwood along with shrubs such as wild rose, snowberry and ocean spray. Eventually we shall also add smaller herbaceous plants. This is the largest restoration project the Society has undertaken so far. We would like to thank all the neighbours and other volunteers whose help and enthusiasm are making it possible.

Most recently, the First West Vancouver Scout Group, the Parks Department and our Society have agreed to collaborate on the removal of ivy from Trails Park. Led by Chris Nemeth, District Commissioner, the Scouts and Venturers will begin work in mid-February.



Pilot House, with its boathouse in foreground, Caulfeild Photo: West Vancouver Memorial Library

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Lighthouse Park Preservation Society is a membership-based non-profit organization formed in 1998 to:

- protect the natural integrity of Lighthouse Park;
- promote public awareness of its natural features;
- and support the development of biological zones near the park boundaries.

President - Alexandra Mancini

Vice President - Jeff Marliave

Past President - Marja de Jong

Westman

Membership Secretary - Aline Brown

Treasurer - May Loudon

Directors

Elspeth Bradbury

Ed Donaldson

Sylvia Mather

Keith Wade



WEST VANCOUVER
COMMUNITY FOUNDATION

EDUCATIONAL TALKS

“The World Needs More Birders”

with

Dick Cannings, M.Sc., R.P. Bio**SATURDAY, MARCH 20th, 2010**

2-4 p.m.

Welsh Hall West

West Vancouver Memorial Library

Dick Cannings is a consulting biologist, renowned for his vast knowledge of birds of British Columbia, and particularly his passion for small owls. Besides teaching field ecology overseas, Dick co-ordinates many agencies and programs for Bird Studies Canada. He will talk about the need for these programs, and the ways in which the public is actively involved in turning bird watching into a collective data base of bird breeding, bird behaviour, and migration. Under Dick's inspiring guidance, anyone can become a birder, and contribute to a better understanding of the future for bird populations facing climate change.



Dick Cannings

Photo: Rick Gray

“Bringing Back the Plants”

with

Dr. Nancy J. Turner

after our

Annual General Meeting

SATURDAY, May 29th, 2010

3:00 p.m.

Phyl Munday Hut, Lighthouse Park

Dr. Nancy Turner is a highly respected ethnobotanist who has been working for many years with Indigenous elders to document detailed knowledge of the traditional diets and other botanical knowledge of the Indigenous Peoples of British Columbia. She is a teacher at the University of Victoria, and the author of 20 books. One of her students, Leigh Joseph, a member of the Squamish Nation, will join Nancy in this presentation. Leigh is working with her elders to undertake an estuarine restoration project, as well as the production of an ethnobotanical book.

Leigh Joseph holding Rice Root, *Fritillaria camchatcensis*,

Photo: Dr. Nancy Turner

ANNUAL GENERAL MEETING

2:00 p.m. Saturday, May 29th, 2010

Phyl Munday Hut, Lighthouse Park

Members and the general public are invited to attend our AGM, and hear guest speaker, Dr. Nancy J. Turner's talk at 3:00 p.m.

TRAIL RESTORATION

Saturday, April 17th 9:00 am - Noon

This spring we shall continue our restoration work along Beacon Trail. Please join us to add mulch to the fall planting. Meet us along Beacon Trail. Please bring gardening gloves, a shovel and a wheelbarrow if possible. In the fall of 2009, we put in 550 native plants, 250 of which were home grown and included several species that we have propagated for the first time. If you would like to know more about our propagation and adopt-a-pot group please call Elspeth at 604-926-9390.

INVASIVE SPECIES PROGRAM

SITE PREPARATION for restoration

Saturday, March 6th

9:00 am - Noon, Caulfeild Park

Wear old clothes and work gloves. Meet at the anchor. For more information, call Alexandra at 604-922-1485.

BROOM PULL - Saturday, May 15th

9:00 am - Noon, Lighthouse Park

Wear old clothes and work gloves. Meet at the upper kiosk in the parking lot of Lighthouse Park.

MONTHLY BIRD COUNTS

Meet at the upper kiosk in parking lot, Lighthouse Park

first Sunday of every month -

March 7th, April 4th - 8:00 a.m.

May 2nd, June 6th, July 4th, August 1st - 7:30 a.m.

Contact Suann Hosie at 604-926-9094 if you would like to participate.



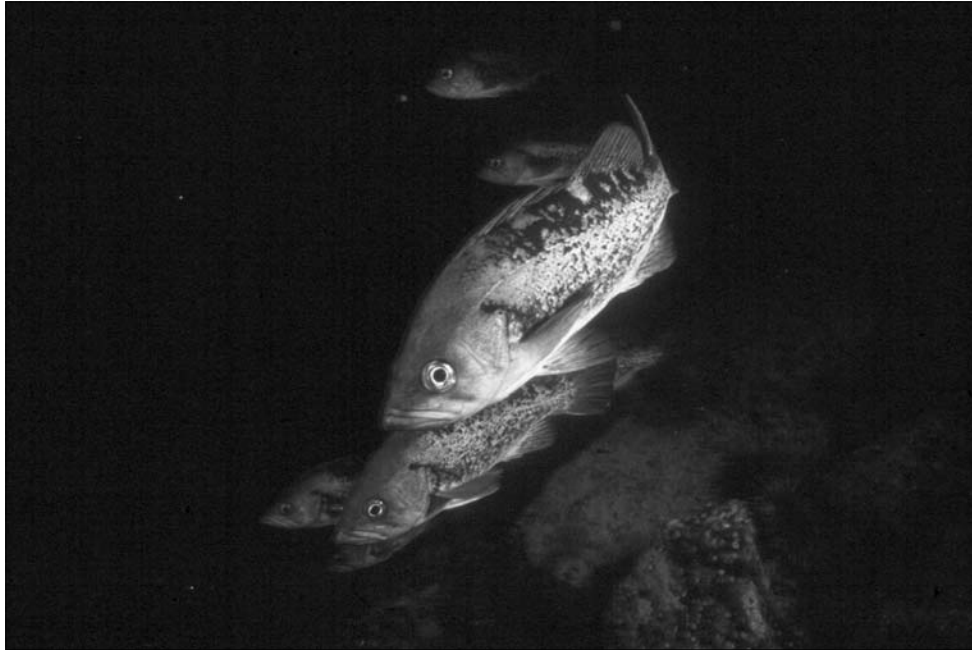
Students of West Vancouver Secondary School helped out at the restoration planting on October 3rd, 2009.

Photo: Elaine Graham



Red-breasted merganser, *Mergus serrator*

Photo: Ralph Hocken



Black rockfish often form schools above rocky reefs where they can retreat into crevices and hide. East Beach by Starboat Cove, Lighthouse Park, has that sort of reef. There is no fishing for rockfish or lingcod allowed in Howe Sound or Burrard Inlet (English Bay), so it is important to report any fishing to DFO violations hotline at 604-666-3500. Photo: Rick Brock

The Vancouver Aquarium team has been attempting to establish black rockfish where they were once abundant along the shoreline of West Vancouver. Black rockfish are still abundant on the outer coast, but they were fished out around Vancouver after the advent of sport downrigger gear in the 1960's.

We are not really prepared to boast this to the world, but signs are emerging that our black rockfish transplants have succeeded. For several years we have been seeing single individual blacks at sites like Hole in the Wall or Whytecliff Park, but this year we have seen two at Cliff Cove (Telegraph Cove), seven at Larsen Bay and ten at Point Atkinson. There were three young year-classes (birth years) mixed at Point Atkinson.

Enough mature fish from Ucluelet were added between 1997 and 2006 to Point Atkinson to create a successful breeding colony. We are learning with our Pacific Canada display at the Aquarium (coppers versus quillbacks) that a colony has to be over 10-12 fish or there will not be many successful pregnancies.

There have been observations of schools of black rockfish dwindling in other areas in the Strait of Georgia and Puget Sound, and one possibility aside from fishing mortality is that the fish may have moved into deeper water as their body size increased. Rockfish generally move deeper as they become older, so this is to be expected, but scuba divers tend to notice a "disappearance" and then interpret that observation as an indication of fishing losses. Both processes can occur together, of course.

It is wonderful to watch the way these new, young fish use the exact same ledges as our original transplants did at the same body size. When they get bigger we will probably only see them in the deeper caves, but our hope is that all of the bigger fish are still there, just beyond our diving reach. The Aquarium fish research team plans to incorporate full details about all the transplants, as well as these recent observations, into a scientific manuscript for publication.

This newsletter is printed on 100% recycled paper and is published twice a year. Members are encouraged to submit articles, photos, or suggestions to lighthouseparkps@gmail.com.

RED-LEGGED FROGS: the SILENT SINGERS

By Alexandra de Jong Westman, M.Sc., R.P. Bio.

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Frogs sprang early into my everyday life. While hiking in the Coastal Douglas Fir ecosystem on Valdes Island my mother and I would often come across amphibians. One afternoon, out from under an old nurse-log, hopped a small frog, with claws but no webbed toes, golden lips and red legs! Imagine our surprise to find such a creature so far from water. On closer inspection, we determined the little critter to be a fine specimen of a Northern red-legged frog, *Rana aurora aurora*.

Although the feet of *R. aurora aurora* are not webbed as typical of amphibians, these frogs are highly aquatic, relying on permanent lakes and slow-moving streams for breeding and rearing of their tadpoles. Once fully metamorphosed adults, these frogs become quite terrestrial in their habits, something only possible on our wet West Coast. The moist understories of our coastal Douglas-fir forests, with their thick moss and lichen layers, enable the adult red-legged frogs to hibernate on the forest floor, which explains our discovery of the rather sleepy frog many meters from any water body in early spring. Unlike many of our other forest-dwelling amphibians, red-legged frogs are highly susceptible to freezing and depend on the moist forest floor and deep lakes with muddy bottoms for hibernation below the ice-levels.

Red-legged frogs are only found from the Washington-B.C. border to the Yukon. They occur on Vancouver Island and

some of our Gulf Islands. On the mainland, this frog ventures no further inland than about 80 km. Somewhere in the middle of Manning Park, the red-legged frog is replaced by the Columbian spotted frog, *Rana leuventris*, which has similar physical characteristics. However, finding the red-legged frog is more difficult than finding some other amphibians, because these frogs do not vocalize above water. If you are intent on finding *R. aurora aurora*, head out on a spring night to large permanent lakes, wetlands or slow-moving streams with a hydrophone, because it is only with this underwater technology that you can hear choruses of these singing frogs.

Amphibians are highly sensitive to any changes in their environments. They are “ecosystem indicators”, being the first group to disappear in a degraded landscape, and the first to reappear when the environment improves.

Red-legged frog populations and their habitats are rapidly decreasing. Two of the biggest threats are habitat loss and invasive species. Wetlands are being destroyed by development, poor logging practices and agriculture. The introduced east-coast native, the American bullfrog, *Rana catesbeiana*, is quickly moving across the Lower Mainland with the help of humans



Red-legged frog, *Rana aurora aurora*

Photo: Alexandra de Jong Westman

and its own strong back legs, most noted for being a tasty French appetizer. These invasive and highly predatory frogs are also linked with the spread of the fungus, *Batrachochytrium dendrobatidis*, or "chytrid fungus". While the bullfrog appears to only be a carrier rather than being afflicted with this fungus, our native amphibians are not. Persistent in water for months, and with the ability to survive extended periods out of water, chytrid fungus has proven to be one of the leading causes of amphibian declines. Interestingly, some populations are capable of withstanding the fungus if no other stresses exist in the environment. As soon as other factors, such as fertilizers, cold or heat stress, predation or pesticides are introduced into the environment, the chytrid fungus is able to take hold with devastating results.

Rana aurora aurora, although relatively common on our West Coast, is "blue-listed" by the provincial government, indicating that its populations in B.C. are threatened, and designated as a species of "Special Concern" under the federal *Species at Risk Act*. Because *R. aurora aurora* is a forest-dwelling species, this is also an "identified wildlife" species, protected from forestry and range practices by the *Forest and Range Practices Act*. This act enables government to establish conservation areas around known occurrences of these frogs, including

their streams, lakes and terrestrial foraging habitats. Unfortunately, these areas, known as "Wildlife Habitat Areas" are merely suggestions for areas to be conserved by foresters and ranchers. Furthermore, the *Species at Risk Act* only has bearing on federally-designated lands. As such, this cryptic frog and its habitats are often under threat of logging, development and other major disturbances without concrete legislation.

Because there is a distinct lack of legal protection for these amphibians, the red-legged frogs and their habitats are reliant on good stewardship by the people who share their habitats and ranges. Frequently, people ask me what they can do for frogs, and my answer is always the same. Protect your ponds, wetlands and streams from fragmentation, destruction or dumping of waste. Enhance these habitats by planting native aquatic and riparian vegetation. And importantly, connectivity must be maintained between these sensitive aquatic environments and the upland coniferous rainforest which is so unique to our West Coast.

To report a sighting of any amphibian, or to get in touch with local experts and get ideas on how you can help your backyard friends, go to:

<http://www.frogwatch.ca>.



NEW OR RENEWAL MEMBERSHIP FORM

Date.....New MemberRenewal.....

Renewal fees are due at the Society's year-end May 31 for the following twelve months.

Name

Address..... City.....

Postal code.....Phone.....Email.....

(*Renewing members please fill in any change of contact information.)

Individual \$15.00 yearly _____ or 3 years at \$40.00 _____

Senior (60+ yrs) \$10.00 yearly _____ or 3 years at \$25.00 _____

Family \$25.00 yearly _____ or 3 years at \$65.00 _____

(Number of individuals in family _____)

Donation, tax deductible \$ _____ (Canada Revenue Agency www.cra.gc.ca/charities)

Membership \$ _____

Please make cheques payable to **Lighthouse Park Preservation Society**, 5605 Keith Road, West Vancouver, BC V7W 2N4