



LIGHTHOUSE PARK PRESERVATION SOCIETY

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NATURE AT WORK by Elaine Graham



High waves during December 20th's storm destroying the mid-section of Point Atkinson's dock. Fisheries & Oceans Canada engineers inspecting the dock after the storm said the dock will be rebuilt. Photo: Elaine Graham

The land we know as Lighthouse Park was set aside by the Dominion of Canada in 1881 as a dark backdrop for Point Atkinson's first lighthouse, which was built in 1874 as one of the conditions to be met before British Columbia joined Confederation. The Canadian army constructed the dock in 1941 to supply the coastal defense garrison at Point Atkinson during WWII. The dock was also essential to the Canadian Coast Guard for delivery of supplies to the light station and technicians who serviced the light. After the light station was automated in 1996, use of the dock declined until September, 2017 when a Coast Guard helicopter dropped off technicians. The landing prompted an alert to Fisheries & Oceans Canada (FOC) and West Vancouver Parks that the dock looked unsafe for continued use.

Confronted with storm damage in January, 2018, FOC declared they had no further use for the dock and would demolish it. Parks agreed, citing a proposed 2018 upgrade to the Caulfeild dock as adequate wharf access for the community. In response, the West Vancouver Historical Society submitted a formal request on behalf of the community to FOC and West Vancouver District to postpone their decision. The Historical Society requested a comprehensive evaluation of the proposed demolition, and consideration of the cultural, heritage and educational values for retention of the dock now and into the future. Following this request FOC and Parks managers visited Point Atkinson on March 22, 2018, agreed to review the matter and give their final decision by May, 2018. The Historical Society heard nothing more - that is until nature took affairs into its capable hands! We await official news, and will keep you posted.

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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 - Elaine Graham
 Treasurer - Nick Miller
 Secretary - Areta Sanders
 Membership - Lynn Nordman
 Directors
 David Cook
 Daphne Hales
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THE BANDITS OF THE NORTH SHORE

by David Cook

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For this issue of the newsletter I will be talking about one of the middle-sized predators of the North Shore, the raccoon, affectionately known as the “bandit”. It is given this rather undeserved descriptor because of its black face mask which has nothing to do with banditry but is an evolutionary adaptation to reducing glare, thus improving the eye's ability to differentiate between light and dark. This feature is used by some other nocturnal and twilight-active species such as the meerkat and the giant panda for the same reason. The raccoon belongs to the large group or “Order” called the Carnivora, which based on their dentition are divided into cat-like and dog-like sub-groups. The raccoon belongs to the dog-like sub-group within which are a number of families such as the Ursidae (bears), Canidae (dogs), and Procyonidae (raccoons). The raccoon family name is apt because *procyon* is Greek for “before the dog star”. This is a reference to the fact that the raccoon family evolved before the true dogs. While raccoons belong to the Order Carnivora, they are not true carnivores but are omnivores like bears and humans.



Fossil evidence indicates the raccoon family, once consisting of a number of species, lived originally in what is now Central America 37 million years ago. Over geological time, the raccoon *Procyon lotor*, moved up the North American continent, successfully adapting to new territories and expanding its diet. By 2.5 million years ago it had colonized most of the United States and southern Canada up to mid-altitude elevations, its northern extent limited by the ice during the Pleistocene Ice Age. It is the only member of the family to leave its ancestral tropical and sub-tropical birthplace. All other species of the family became extinct.

The name raccoon is derived from an Algonquin First Nation word *arukan* which means “scratches with hands”. The specific epithet *lotor* is Latin for laundryman or washer. All these names relate to the feeding behaviour of the animal, which is in fact not washing but identification of the food item using sensitive hairs on the hands. The raccoon preys upon smaller wildlife and is in turn preyed upon by larger wildlife. On the North Shore, after the ice receded 12,000 years ago the predators of the raccoon would have been grizzlies, wolves, cougars, bobcats and humans. Since European colonization and urbanization the wild predators have over time been largely removed, replaced as in the case of the wolf by the coyote, or rendered ineffective due to changing relationships between wildlife and humans. On the North Shore a major part of this dynamic has been the fact that raccoons and coyotes are protected from hunting and trapping and can only be removed by the Conservation Officer Service or registered pest control companies. USA studies have shown that raccoons are adept at avoiding packs of coyotes by staying outside of their well defined range boundaries. Therefore the likely sole predator of the North Shore raccoon is the single, free-ranging coyote. Studies, also in the USA, have shown that during low points in population size, raccoon alpha males establish and defend well-defined territories. As numbers increase, territorial boundaries become blurred and males are unable to defend them. Territories begin to overlap, which facilitates transfer of pathogens. Sudden and catastrophic die-offs due to disease such as distemper and rabies can follow. This seems to be what happens on the North Shore, where wide fluctuations in the raccoon population have been observed over multi-year cycles.

The observations here are based on research carried out in the USA, where there has been extensive hunting and management of raccoons and coyotes. They are not necessarily transferable to the North Shore, where there have been no biological studies of raccoon populations.

A YEAR WITH THE LEOPARDS

by former West Vancouver student Lucy Smyth

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It was 4:00 am, and I leaped out of bed to the sound of my alarm clock. Although it was still dark outside, the first of the morning birds were beginning to sing. An hour later, I was bumbling along the gravel road, on my way to Houtboschrand where my last camera trap grid of the year was located. The back of a bakkie, as it is locally known (in other words a truck), was packed with a cooler box filled to the brim with ice, which I was hoping would stay frozen at least until lunch time despite the scorching heat; a five litre water bottle; a large backpack and various crates containing an assortment of field equipment. The sun was up by that point, and my rear-view mirror was providing me with the most beautiful miniature version of a bright red African morning sky. In front of me the savanna was busting with life, while much of the rest of the world was still asleep. As I crested the next hill an open patch of grass was caught in the most beautiful golden light, and two male lions with full dark manes trotted across the road in front of me. The best kind of traffic to meet on the road.

I've always loved adventure and the great outdoors and wanted to become a conservation biologist. After finishing high school at Sentinel Secondary School in West Vancouver, I combined my passions and headed off for an adventure to South Africa to study conservation biology. Five years later, I now find myself in the midst of my Master's Degree in Biological Sciences at the University of Cape Town, bumping my way down the roads of Kruger National Park at 5:00 am in the morning for the last year. Throughout my undergrad in Cape Town I became involved in various projects being run by Panthera, an organisation focused on the protection of wild cats, and I now have a project of my own. My Master's thesis, a collaboration between Panthera, iCWild (the Institute for Communities and Wildlife in Africa) and Singita, is a population assessment of the leopards of Kruger National Park and surrounding areas.

As evidence of the human race reaches more and more remote regions, populations of wild animals are struggling to survive at their former rate. Basically humans and wildlife are ultimately in search of similar things: food, water and shelter. Luckily to this day I have not heard of humans having any issue sharing a water source with fellow four legged or winged creatures, but the situation doesn't seem to be so simple when it comes to food or living space. Whether it be a concern for human safety, an effort to safeguard crops or livestock, or one of many other reasons, human-wildlife conflict is rife in today's world, resulting in high levels of animal persecution.

Leopards, which exist in approximately 75 countries across Africa and Eurasia and have lost 49% of their African and 84% of their Eurasian historic ranges, are one of the most persecuted species of all. Given their solitary, secretive nature as well as their acrobatic prowess they exist around and among human settlements in many areas, resulting in high levels of human wildlife conflict.



A YEAR WITH THE LEOPARDS (continued...)

by Lucy Smyth

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Besides being shot, snared or poisoned due to human-wildlife conflict, leopards also fall victim to bushmeat poaching, poorly managed trophy hunting, and an illegal trade of their body parts, most importantly their skins.



While international trade in leopard skins is illegal, leopard skins still form an important part of the ceremonial wear worn by members of the Nazareth Baptist (or Shembe) church. It is estimated that between 1500 and 2500 leopards are killed annually to satisfy the demand for their skins. Genetic evidence shows that up to 10% of these skins are coming from the region in which Kruger National Park is found. Kruger National Park is the largest protected area in South Africa. Despite the fact that leopard populations throughout Africa have been documented to be declining at a rate of approximately 8% per year, there have been no recent studies on the leopard populations within Kruger National Park, so

we have no idea how the leopards in the park are doing. What we do know however, from camera-trap surveys run by Panthera in 2017, is that the highest population density of leopards recorded throughout Africa is in the Sabi Sands, a small private reserve on the edge of Kruger National Park. This situation therefore provides the ideal grounds for a study on the different factors, both anthropogenic and natural, that affect leopard population structure, density and health.

In an effort to understand more about these elusive carnivores I spent ten months, from March until December 2018, setting up camera trap grids in Kruger National Park as well as the neighbouring Sabi Sands Game reserve. Throughout the year we ran a total of seven separate grids, each of which consisted of approximately 90 cameras placed in 45 different locations. Two cameras were placed at each location, one on either side of the road, game trail or drainage line, to provide us with a photograph of both sides of each leopard that walked past. Inevitably the camera-traps, triggered by infra-red sensors that detect animal movement, photographed many other creatures big and small along with the sought after leopards and provided some spectacular images. Data from these surveys will now be analysed to provide us with valuable information on these elusive carnivores.

A year of camera-trapping, full to the brim with beautiful photographs, long walks, bright red sunsets and animal encounters has left with me an even greater notion of the importance of conserving the pieces of wild, untouched land that still exist. I would like to thank the Lighthouse Park Preservation Society for the book prize awarded to me while I was at school, and for the Society's encouragement which I took with me to Cape Town five years ago. I am pleased to report that it has, in some way, reached the leopards of the South African savanna.

VOLUNTEER OPPORTUNITIES & EVENTS

For all volunteer events please wear old clothes, sturdy shoes and good work gloves. Twelve years and under must be accompanied by an adult.

WEED PULL, SATURDAY, FEBRUARY 16

9:00 am - noon

NORTH PICCADILLY PARK

Meet at the junction of Piccadilly North & Clovelly Walk, north of the railway crossing.

IVY PULL, SATURDAY, MARCH 9

9:00 am - noon

LIGHTHOUSE PARK

Meet at the upper kiosk in the parking lot.

BROOM PULL, SATURDAY, MAY 11

9:00 am - noon

LIGHTHOUSE PARK

Meet at the upper kiosk in the parking lot.

LPPS ANNUAL GENERAL MEETING

SATURDAY, JUNE 15, 2019

Save this date, more details later

MONTHLY BIRD COUNTS

Everyone welcome



Meet at the upper kiosk of the parking lot in Lighthouse Park on the first Sunday of the month.

8:30 am - Feb. 3, March 3, April 7

7:00 am - May 5, June 2, July 7, Aug. 4

8:30 am - Sept. 1, Oct. 6, Nov. 3

For more information call Suann, 604-926-9094

Two joint events for the Lighthouse Park Preservation Society and Nature Vancouver led by LPPS director, David Cook. Membership in these societies is not required.

Ecology of the Old-Growth Forest of Lighthouse Park

Tuesday, June 25, 10:00 am - 1:00 pm

Meet at the upper kiosk in the parking lot.

Geology of Caulfeild Park, a potential geo-heritage site, and the coastline of Burrard Inlet.

Tuesday, July 30, 10:00 am - 1:00 pm

Meet at the anchor in Caulfeild Park.

Registration required for both events.

Contact David at cookeco2@yahoo.com to register and for more detailed information.



www.capilanou.ca/EarthWorks/



Wild Whales: Marine Mammal Research and Conservation in British Columbia

February 11, 7:00 pm Blue Shore Theatre

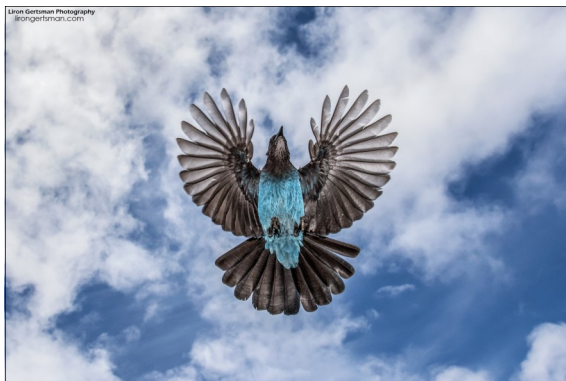
Dr. Lance Barrett-Lennard, director of Ocean Wise's Marine Mammal Research Program, head-quartered in the Vancouver Aquarium.

The Future of Ice

March 27, 7:00 pm, Blue Shore Theatre

Dr. Gwenn Flowers, professor Department of Earth Sciences at SFU, explores how glaciers work, why they are changing and the global and local implications of this change.

EDUCATIONAL TALKS



BRITISH COLUMBIA: PARADISE FOR A NATURALIST with **LIRON GERTSMAN**

SATURDAY, MARCH 2, 2019

2:00 - 4:00 pm

Welsh Hall

West Vancouver Memorial Library

Join award-winning photographer Liron Gertsman for a presentation exploring the incredible birds, wildlife and landscapes of beautiful British Columbia.

OWL PROWL in LIGHTHOUSE PARK

with

O.W.L.

SATURDAY, MARCH 16, 2019

7:00 - 8:30 pm

Sk'iwitsut Hut

Join O.W.L (Orphaned Wildlife Rehabilitation Society) for a Walk on the Wild Side! After a short presentation about raptors, including a visit with two live raptors, we will go outside for a guided owl prowl. Guaranteed to be a hoot!

Meet at 7:00 pm at Sk'iwitsut Hut,
at the foot of Beacon Trail