



Ann Eriksson installing bat detectors on Thetis Island. Photo by P. Ommundsen:  
Inset: Little Brown Myotis. Photo by Ralph Eldridge

## Island Wildlife: Bats

The Islands Trust Fund and partner Thetis Island Nature Conservancy were thrilled to confirm that multiple bat species are utilizing the forests and wetlands of Thetis Island, including Fairyslipper Forest. Volunteer biologists Peter Ommundsen and Ann Eriksson recorded bat activity over the course of several evenings this past summer and were able to distinguish seven species of bats flying over a pond not far from Fairyslipper Forest and utilizing the forests on Burchell and Moore Hills. The study was carried out using bat detectors, which record acoustic files of passing bats. The files are then filtered to count the number of passes and identify the individual species. It was especially exciting to determine that an endangered bat species, the Little Brown Myotis, is using these areas.

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) listed Little Brown Myotis (*Myotis lucifugus*) as Endangered in 2012. This was an emergency assessment following the discovery that White Nose Syndrome, an introduced fungal disease that is highly contagious between bats, has been threatening populations of this bat in Eastern Canada and the United States. White Nose Syndrome was first detected in Canada 2010 and has spread rapidly since then, killing millions of bats. The disease has not yet been identified in B.C. Emerging research indicates that naturally occurring bacteria may

provide some species of bats with a natural defence, and could potentially be used to develop a treatment for susceptible species (<http://news.ucsc.edu/2015/04/bat-disease-treatment.html>).

All of the sixteen bat species found in British Columbia are insectivores. Though we may only catch the odd glimpse of these small winged mammals feeding at dusk, they play an active and important role in coastal ecosystems, consuming hundreds of insects per hour and depositing nitrogen-rich guano in the upland forests.

Half of the bat species found in B.C. are considered at risk. Currently, the biggest threat to bat populations in our region is habitat loss. Bats require wetlands, streams, creeks and rivers for feeding, as well as older forests with wildlife trees for roosting. Loss of these ecosystems to development has greatly reduced available habitat. The threat of White Nose Syndrome spreading to B.C. creates a significant risk to these already vulnerable populations.

The islands of the Salish Sea provide valuable habitat to our native bats. The rocky crevices, caves, older forest and wetlands found on islands like Thetis provide some of the healthiest bat habitat in Canada. Protecting some of these areas as nature reserves helps to ensure that bats remain a functioning part of our diverse coastal ecosystems.

### How can you help B.C.'s bats?

- Learn more about bats in your area: They are fascinating creatures, and provide us with underappreciated insect control! Visit [www.bcbats.ca](http://www.bcbats.ca) and [www.batcon.org](http://www.batcon.org)
- Provide natural habitat. Dead and dying trees are habitat for bats, birds and insects so consider leaving these as wildlife trees wherever it is safe to do so.
- If you have bats roosting in your house or outbuilding, consult a Community Bat Program to find ways to live with the bats or to exclude without causing harm. Bats are protected under the BC Wildlife Act.
- Become a citizen scientist and participate in a local bat count. Find out if a Community Bat Program exists in your area: [bcbats.ca/index.php/contact-us](http://bcbats.ca/index.php/contact-us)
- Support land protection initiatives in Canada's islands in the Salish Sea. Donate now to support our acquisition of Fairyslipper Forest on Thetis Island!



Shiner Perch in eelgrass meadow. Photo by Jamie Smith, Coastal Photography Studio

Greetings, friends:

With “*The Heron*” we reach out to everyone who shares our interest in protecting the natural values of Canada’s islands in the Salish Sea. Land conservation work can be challenging, but in our experience the steady stream of successes comes about through shared awareness, commitment and partnerships. We hope this edition of “*The Heron*” provides you with some gems of information and inspiration.

Over the past few years, we have turned some of our attention to a vulnerable but important part of our island environment: the nearshore. Much of the marine life in the Salish Sea relies on the intertidal zone for spawning, early life and food sources. To this end, in 2012 we embarked with two partners, the Seagrass Conservation Working Group and SeaChange Marine Conservation Society, to map eelgrass beds around the islands. Eelgrass mapping is now complete. A second project, carried out in partnership with BC Marine Conservation and Research Society, is mapping forage fish habitat for the islands. The knowledge gained from these projects will support best practices in conservation, restoration and planning. You can experience an interactive tour of marine habitats using the [MapIT Shoreline Application](#) on our website and learn about the value and protection of these habitats.

We believe in building awareness and relationships throughout the islands as a foundation for working towards shared goals. Over the past year we collaborated with Lasqueti Island Nature Conservancy on a landowner outreach project with the goal of increasing awareness of natural history, land protection and conservation. We also worked with Pender Islands Conservancy Association and Environment Canada to put on a one-day land conservation outreach event for realtors. The response to these projects was positive and inspires us to plan similar outreach activities on other islands.

The islands make up a significant proportion of the area where Coastal Douglas-fir forests and associated ecosystems once thrived but are now threatened. We are pleased to be taking an active role in a conservation partnership that is bringing together local governments, provincial and federal agencies, academics, conservation organizations and others to take a co-ordinated approach to protection. Read more about the Coastal Douglas-fir & Associated Ecosystems Conservation Partnership (CDFCP) and CDF ecosystems in this issue of “*The Heron*”.

You can find out about our most recent success in conservation: the protection of Wallace Point (the southernmost point of North Pender Island) through a conservation covenant and a success in the making: the creation of the first publicly accessible nature reserve on Thetis Island. We are happy to be doing all we can to support Thetis Island Nature Conservancy and Cowichan Land Trust in a vigorous campaign to acquire and protect Fairyslipper Forest.

We appreciate your interest in the Islands Trust Fund and your support for our work.

A handwritten signature in black ink, appearing to read 'Tony Law'.

Tony Law  
Chair, Trust Fund Board



Wallace Point

## Pender Island Landowners Protect Wallace Point through NAPTEP

Michael and Ann Philpot are the newest landowners to protect land in the Salish Sea through the Natural Area Protection Tax Exemption Program (NAPTEP). Michael and Ann own the southernmost tip of North Pender Island – an area with five sensitive ecosystems and habitat for river otter, nesting bald eagles and provincially blue-listed seaside juniper. Through NAPTEP they have placed a conservation covenant over 1.63 ha (4 acres), protecting it forever from development and human disturbance.

“Wallace Point is truly unique in all of the Gulf Islands,” says Michael Philpot. “Over the years we have learned our property hosts five Environmental Development Permit Areas which supports our belief in the property’s true natural beauty both onshore and offshore. We are blessed to have purchased such a property and want to ensure the ecological integrity is maintained for time and beyond.”

Wallace Point is an excellent example of the connection between islands and the ocean. Surrounded by bull kelp beds, the point provides habitat for species like river otter to den and feed after they search for food offshore. Similarly, the point boasts excellent perching and nesting trees for bald eagles that need easy access to marine areas so they can fish for food to feed their young in nearby nests.

Shorelines in the islands are popular places for development, and waterfront living can impinge on important wildlife habitat. NAPTEP provides an opportunity for humans to share habitat with nature. “It has been our pleasure to work with the Island Trust Fund on this project,” says Michael Philpot, “It provides us solace that we have done our little bit to conserve a precious piece of property.”

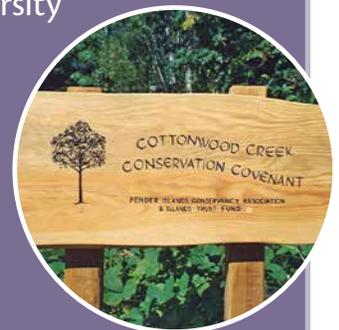
### NAPTEP

Do you like to share your land with nature? Consider applying to NAPTEP and receive a 65% property tax exemption on the area that you protect. Application deadline for 2017 tax year is April 1, 2016.

Bowen Island Municipality recently signed an agreement with Trust Council to expand NAPTEP to Bowen Island. We are thrilled to be announce that NAPTEP is now available in the entire Islands Trust Area!

### Morrison Waxler Biodiversity Protection Legacy Fund

The Morrison Waxler Biodiversity Protection Legacy Fund offers grants to North & South Pender landowners to assist with costs to register a conservation covenant (including NAPTEP covenants). The result of a generous donation from the family of Barrie Morrison and Nancy Waxler, the fund can help cover survey plans, biologist reports, legal costs and covenant registration costs up to \$4,000. If you have property on North or South Pender Island that you wish to protect in perpetuity, please contact us to discuss the Morrison Waxler Biodiversity Protection Legacy Fund: [itfmail@islandstrust.bc.ca](mailto:itfmail@islandstrust.bc.ca) or 250.405.5186 (toll free via Enquiry BC at 1.800.663.7867).



## Biodiverse and Rare: Coastal Douglas-fir Ecosystems



CDF on Saltspring, photo by Kristine Mayes

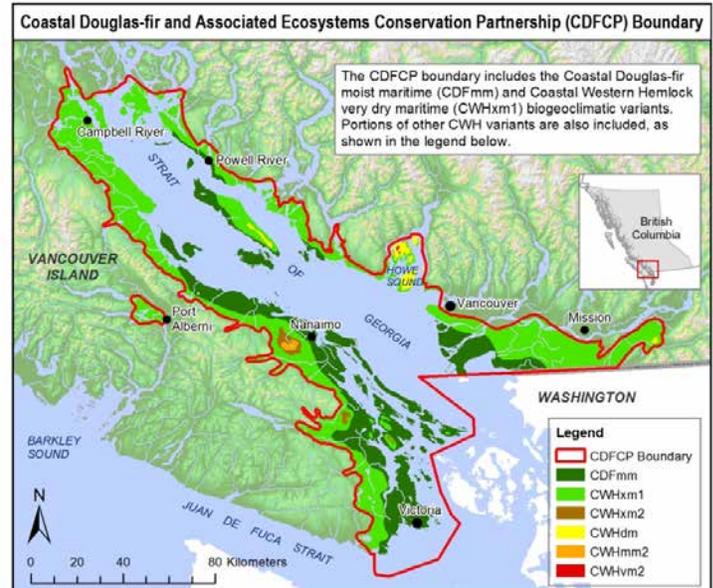
Coastal Douglas-fir (CDF) ecosystems are iconic throughout the Gulf Islands and along coastlines of Vancouver Island, the Lower Mainland and the Sunshine Coast. These are the forests of our region, the backdrop to our lives – a tapestry of tall evergreen Douglas-firs, gnarled arbutus and oaks, ferns, Oregon grape and wild flowers. CDF ecosystems include our forests, wetlands and shorelines. These ecosystems are locally familiar - they are our home - yet they are globally rare.

The CDF biogeoclimatic zone is one of sixteen biogeoclimatic zones in British Columbia. The CDF occurs from shorelines to elevations of 150 metres above sea level. The CDF is not one uniform ecosystem, but rather interlinked systems that include Douglas-fir and Arbutus forests, Garry oak woodlands and skunk cabbage / red alder swamps.

The CDF zone contains the highest diversity of plant species of any zone in BC and provides habitat to more species at risk than any other ecosystem in the province. At-risk species of the CDF include the: Peacock Vinyl Lichen; Coast Manroot, a member of the cucumber family; Threaded Vertigo Snail; Western Screech Owl; Sharp-tailed Snake and Townsend's Big-eared Bat.

Today, less than one per cent of the CDF is old growth forest. Human activity has permanently converted 49 per cent of the CDF land base. Approximately 75 per cent of the human population of BC lives in the CDF zone, including in urban centres such as Nanaimo, Vancouver and Victoria.

Communities, individuals and organizations are increasingly working together to protect CDF ecosystems. Approximately nine per



cent of the CDF zone is protected in conservation areas such as parks and nature reserves. Governments, non-government conservation organizations, and community members have formed the Coastal Douglas-fir and Associated Ecosystems Conservation Partnership (CDFCP) to promote shared stewardship. Land conservancies are working with partners to acquire sites and create natural corridors to connect ecosystems. Additionally, private landowners are working with conservancies and placing voluntary conservation covenants on natural areas of their land.

The islands are an essential part of CDF conservation. Approximately one quarter of CDF ecosystems lie in the Islands Trust area. Although the area has undergone a similar amount of logging as other areas of the CDF, approximately 85% of the region is still in a natural state – meaning logged areas have regenerated and the land has not been converted permanently to residential, commercial, industrial or agricultural uses.

With increasing awareness and a new, collaborative strategy to conserve the rare ecosystems of the CDF zone, the Islands Trust Fund looks forward to continuing our work with landowners and partners to save the forests we call home.

### For more information or to get involved:

- Coastal Douglas-fir & Associated Ecosystems Conservation Partnership (CDFCP) <http://www.cdfcp.ca>
- BC Ministry of Environment, Lands and Parks: *Coastal Douglas Fir Ecosystems* <http://www.env.gov.bc.ca/wld/documents/douglasfir.pdf>



#### CDF Species at Risk

Coast Manroot *Marah oregana*  
Provincially Red Listed

In 2006, the population consisted of 18 mature individuals in three locations. (SARA Registry)



Northern Red-legged Frog *Rana aurora*  
Provincially Blue Listed, Federal SARA  
Status: Schedule 1, Special Concern

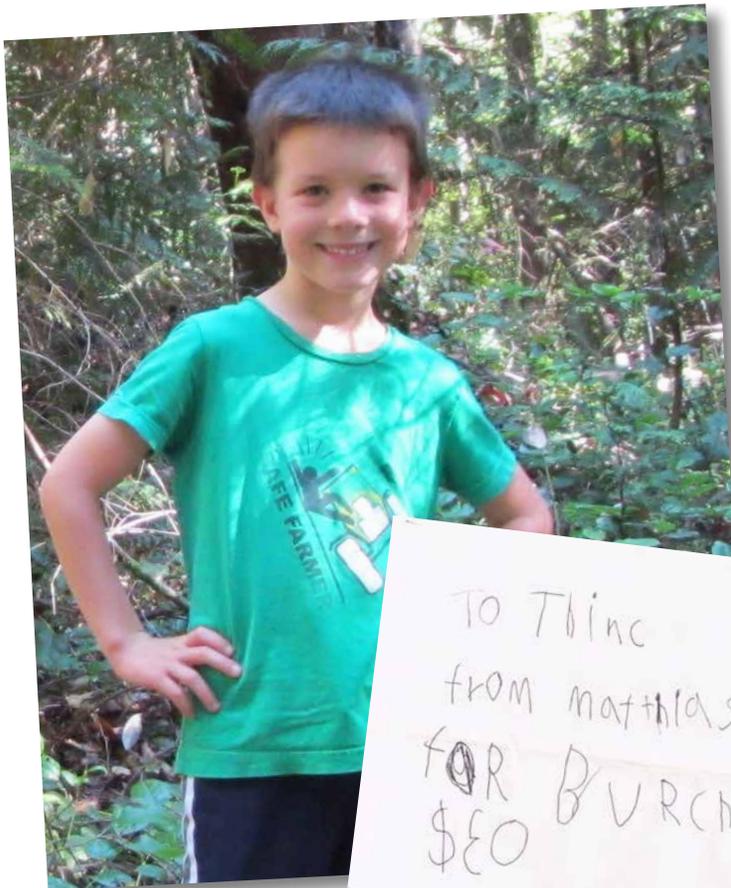
# Current Campaign: Fairyslipper Forest Community Nature Reserve

## Protecting Coastal Douglas-fir ecosystems with your support

In 2014, the Thetis Island Nature Conservancy (ThINC), the Cowichan Land Trust and the Islands Trust Fund partnered with the goal of acquiring a 16-hectare (40 acre) property on Burchell Hill on Thetis Island. Fairyslipper Forest, named after the fairyslipper orchid, *Calypso bulbosa*, contains sensitive Douglas-fir and Arbutus woodlands and habitat for a number of species at risk and species of concern.

Fairyslipper Forest would be the first publicly accessible protected area on Thetis Island, offering a recreational trail and serving as an outdoor classroom for island youth. The property also forms part of an important watershed, retaining and filtering water as it moves down Burchell Hill. Species such as Common Nighthawk (*Chordeiles minor*), Northern Red-legged Frog (*Rana aurora*) and Pacific Sideband Snail (*Monadenia fidelis*) will forever have a safe place to call home.

Together, we have until June 2017 to raise \$ 560,000 to cover the cost of the land and associated expenses.

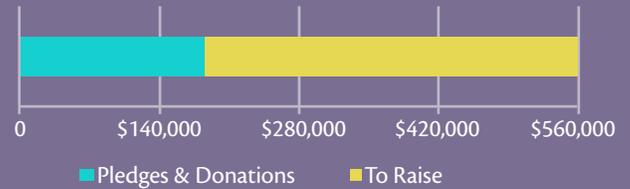


Matthias Bannister, aged 7, donated his birthday money. Photo by Kelly Bannister

### The Goal:

To raise \$ 560,000 to acquire 16-hectares of Douglas-fir forest

### Progress to date:



### Conservation impact of donations:

- \$ 3. 50 - One square metre of Fairyslipper Forest
- \$ 35 - An area the size of the welcome kiosk at the Thetis Island ferry terminal remains natural.
- \$ 175 - The footprint of a small apartment is preserved forever

See back cover for donation options



Fairyslipper Orchid, Photo by Todd Carnahan

To date, \$184,800 has been raised to support this conservation project. More than 100 Thetis islanders, out of a population of 350, have pledged or donated a third of the funds needed to purchase the property. Supporters include seven-year-old Matthias Bannister, who recently donated his birthday money to conserving the property.

Please consider a donation to support the acquisition of Fairyslipper Forest. For donations through to December 23<sup>rd</sup>, Islands Trust Fund will send e-card notifications to individuals or groups that have inspired your gift.

To learn more about Fairyslipper Forest visit [www.IslandsTrustFund.bc.ca/Fairyslipper](http://www.IslandsTrustFund.bc.ca/Fairyslipper) or [www.ThetisIslandNatureConservancy.org](http://www.ThetisIslandNatureConservancy.org)

## Managing Protected Areas

Managing protected areas requires a solid plan and a lot of hands-on work. The Islands Trust Fund partners with local conservancies and volunteers to care for and restore its nature reserves. Any safety or ecological concerns the Islands Trust Fund identifies during monitoring visits are quickly and collaboratively addressed. Read on to learn about three recent property management initiatives.

### Long Bay Wetland Nature Reserve, Gambier

Restoration work is ongoing on the Long Bay Wetland Nature Reserve, a 38-hectare Trust Fund Board (TFB) property on Gambier Island. Donated to the Trust Fund Board in 2005, the property protects a key part of the Long Bay watershed.

The previous owners logged part of the property before donating it as a nature reserve. Some of the logged areas and a gravel pit once used for road building were not regenerating well on their own, so ITF and its partners stepped in to give a helping hand.

The forests surrounding the Long Bay Wetland are part of the Coastal Western Very Dry Marine ecosystems. The restoration plan, initiated in 2013, is to regenerate the property with plants from these ecosystems. To this end, an excavator was brought in to loosen compacted sand and gravel. The area was then hydroseeded - a planting process spreading a slurry of mulch and native plant seeds.

Conservation covenant co-holders, the Gambier Island Conservancy and the Sunshine Coast Conservation Association, as well as the Brigade Bay Homeowners Association, are taking an active role to protect native species on the reserve. Protection of native species from deer grazing is ongoing. Members of a February 2015 work party protected 60 young cedar trees with wooden stake and stucco wire cages to prevent deer grazing.

### Trincomali Nature Sanctuary, Galiano

This February, an energetic group undertook a restoration project at Trincomali Nature Sanctuary. The project was the result of collaboration with many groups and funding sources. Trincomali Nature Sanctuary is a 12-hectare waterfront parcel on Galiano Island providing habitat for sea birds and raptors.

After volunteers spent years removing invasive species from disturbed sites and an old logging road on the property, it was time to plant trees in the cleared areas. Galiano Conservancy Association provided tools, mulch and locally-grown plant stock from their nursery. Habitat Acquisition Trust (HAT), the property manager and covenant co-holder, brought 26 keen volunteers to the site from Victoria.

continued on pg 7



Top to bottom:  
Trees caged for protection by volunteers ;  
HAT volunteers plant native species;  
Trincomali Nature Sanctuary, Galiano

continued from pg 6

Volunteers planted over 140 native trees and shrubs in an area monopolized by Scotch broom for over 60 years. Trees and shrubs were planted in clusters, and a thick blanket of mulch spread in a three foot diameter around each planting will discourage the growth of invasive species, particularly introduced grasses. To protect the plants, volunteers placed deer fencing around the clusters, with a small number of plants and trees caged individually. Volunteer wardens continue to monitor the site for plant survival.

## Elder Cedar Nature Reserve, Gabriola

Elder Cedar Nature Reserve is a 65.36 hectare Trust Fund Board property on Gabriola. The Reserve contains some of the last remaining mature forest on the island.

In 2014, the namesake towering Western redcedar was showing signs of distress. For years, visitors to the nature reserve have enjoyed getting close to the tree. This foot traffic compacted the soil, damaging roots critical to the tree's health. Additionally, no understory vegetation was able to grow.

The Elder Cedar is dependent in part on the trees around it. Intertwining root plates keep the tree from failing at the roots and falling. The large trees nearby also deflect wind from impacting the upper crown of the Elder Cedar. Islands Trust Fund and covenant co-holders, Gabriola Land and Trails Trust and Nanaimo and Area Land Trust, consulted an arborist and reviewed options to maintain the tree's health.

The Initial measures taken to restore and preserve the Elder Cedar include a simple split-rail fence surrounding the tree. An interpretive sign explains restoration efforts and encourages visitors to stay on trails. Oregon-grape and sword fern have been transplanted in the understory, and coarse woody debris have moved to the area. Forest debris is accumulating with less foot traffic, but the compacted soils will take time to recover. We hope that these initial measures will allow the tree's root system to recover. The Islands Trust fund is considering a more permanent solution, such as a boardwalk. A boardwalk, while expensive, would preserve the Elder Cedar while allowing visitors to get close to this amazing tree.



Top: Sign at Elder Cedar Above: Newly planted underbrush at Elder Cedar

## Conservation Strategy

The Coastal Douglas-fir Conservation Partnership (CDFCP) is a collaboration of organizations, individuals and governments working together to conserve the Coastal Douglas-fir Biogeoclimatic Zone. The Islands Trust Fund and Islands Trust Council joined the Coastal Douglas-fir Conservation Partnership (CDFCP) in 2013 and ITF staff currently participate in the CDFCP Steering Committee. In 2015, partners worked together to create a CDFCP Conservation Strategy. The CDFCP Conservation Strategy identifies five primary goals for the conservation of Coastal Douglas-fir and associated ecosystems. To read more about these goals download the Strategy at [www.cdfcp.ca](http://www.cdfcp.ca).

# Support island habitats. Donate today.

## Our 100% Promise

When you donate to the Islands Trust Fund, every dollar of your donation goes directly to protecting endangered island habitats.

All donations of \$20 or more will receive a tax receipt for Canadian income tax purposes. The Islands Trust Fund is a qualified donee under the *Income Tax Act*.

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YES! I want to help protect natural habitat on the islands

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Please designate my donation to:  Where most needed

Opportunity Fund  Covenant Management and Defence Fund

Lasqueti Island Acquisition Fund  Gambier Island Acquisition Fund

Fairyslipper Forest (Thetis Island Acquisition Fund)

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Prov/State \_\_\_\_\_ Postal/Zip code \_\_\_\_\_

Phone \_\_\_\_\_

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Yes, I am okay with public recognition of my donation.

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## Thank you for your support!

We would like to thank the numerous individuals and organizations that help the Islands Trust Fund and our partners protect rare ecosystems and habitat. Your contributions to the work we do are greatly appreciated.

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