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Waututh artist Jordan Gallie, or pick one up for your own wardrobe, or shopping bag. The return of the osprey is something we collectively celebrate each summer, and thanks to Jordan's Coast Salish design we can wear it with pride all year long! \$20 black ink on white, S. M, L, XL, 2X, 3X, plus 100%

cotton tote bags.

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TEES & TOTES

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WINGSPAN

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Welcome to Wingspan!

We want to stay connected with you.

In this issue of Wingspan, we spotlight the threats to shorebirds from continued industrialisation at Roberts Bank 2, with our features writer Chris Rose on pg 10. More threats to dwindling bird numbers are being challenged by Indigenous land guardians across BC, with a feature on page 5. Birding is, of course, something that grips many of us, especially those that started young. With thanks to Melissa Hafting and Alice Sun, we highlight young birders across BC on page 16.

In our last Wingspan COVID-19 response edition, we invited you to respond to our pandemic fundraising appeal to adapt and sustain the work of the Wild Bird Trust of BC. With thanks to our members and donors who responded, our provincial Wingspan work and Maplewood Flats restoration is thriving—in spite of the pandemic.

To help us stay connected with our 1,350 members, Canada Post is delivering a 2021 Coast Salish Birds calendar to every home. The coming months of COVID-19 will be difficult, but we guarantee to brighten your days with BC's beloved birds in the pages of our special edition calendars. Please consider making a secure online donation and purchasing gift calendars for family and friends at wildbirdtrust.org.

Since the global pandemic shut down our in-person activities, we have received thousands of views on our 25+ web broadcasts, available at wildbirdtrust.org. In one highlight program, Jude and Al Grass hosted a birding conversation in their backyard over scones and tea. Another favourite was a show we co-produced with New Forms Festival featuring Chief Dan George's nature poems, read by his great granddaughter Rachelle George, along with Saied Kooshki's santoor performance. That program has 2250 views on our Maplewood Flats Facebook page! Between printed Wingspan editions, we post content on our website, to our monthly e-newsletter subscribers and to @ MaplewoodFlats on Instagram, Facebook and Twitter.

While our education programming has moved online, the Maplewood Flats trails remain open, with some trails marked as one-way. If permitted by health advisories, the Corrigan Nature House can be visited on weekends (11-3pm) in family bubbles. Our 3rd Annual Members' Photography Exhibit is currently on display and can be visited pending the latest COVID-19 guidelines. Calendars and gifts can also be purchased on-site.

We are hosting our virtual Annual General Meeting on December 12 and invite all WBT Also thanks to our 2020 seasonal staff: Kirsten Bradford, Alice Sun, Maddie Edmonds, Senagwila Wyss, and Marisa Bischoff.

I'd like to introduce our three new staff: Braela Kwan, Nicole Preissl and Marisa Bischoff (who has stayed on in a new role as Assistant Restoration & Site Manager). We'd also like to thank our contractors for our Nursery Growth Project: Erin Kendall and Cease Wyss. Finally, a huge thanks to our retiring Site Manager Ernie Kennedy, as we get set to welcome his replacement in an expanded role: Restoration & Site Manager.

This work is not possible without the financial assistance of Wingspan readers, members and recent donors: Les Leighton, Cove Continuity Advisors Inc., Jack Irvine (10 yr old cub scout with 18th Seymour Club who raised \$538), Donna Clark (monthly donor), Lilly Wong (month-

Wingspan continues to improve on our editorial mandate of protecting wild birds in BC and advancing reconciliation through conservation.

members to join. At this meeting, we will report on the past year's achievements, program successes, organizational financial position, and human resources. We will also present the ongoing planning to create and implement a strategy to integrate Traditional (Indigenous) Ecological Knowledge into all our systems and operations.

Our Wild Bird Trust of BC Board of Directors continues to build a participatory democratic organisation, and I'm pleased to see our active members swelling the ranks. Fifty people attended our September Volunteer Orientation, and we welcome new active members to this meaningful work! I would like to thank outgoing Board members Donna Clark (who supported three critical years of change for WBT) as well as Steven Hill. ly donor), Jeff Martino (in honour of Alex Douglas), David Fernig (in honour of Susan Kent), Mary Apps, Kitty Castle, Jake Madison, Debbie Haggan (in memory of Laura Marshall), Rachel Foster, as well as several anonymous donors.

Wingspan continues to improve on our editorial mandate of protecting wild birds in BC and advancing reconciliation through conservation. This is crucial work in these times as the climate crisis surrounds us, with devastating impacts on the world's bird populations. We believe that in BC, the outstanding issues of land stewardship, Indigenous rights and conservation all go hand-in-hand to protecting wild birds. We hope you will support this important work and enjoy this issue of Wingspan.

Jude Grass, Vice President and Irwin Oostindie, President

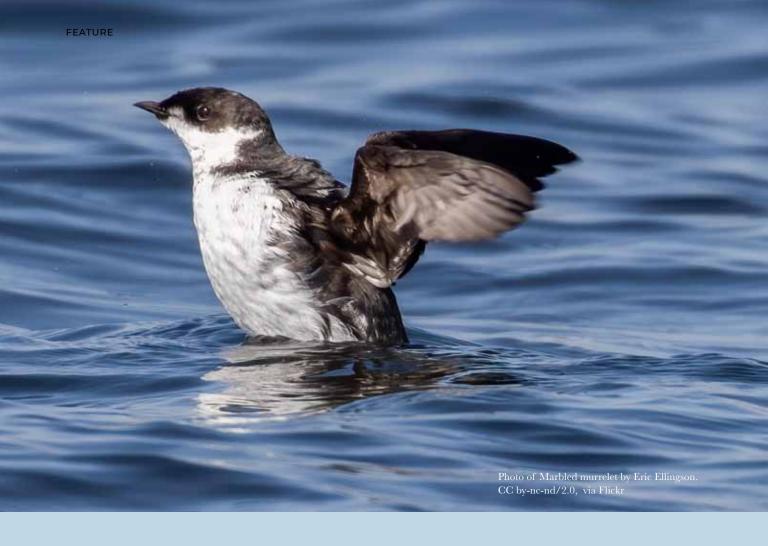


British Columbia Land Guardians

Sustaining biodiversity is only possible with Indigenous leadership and consent. First Nations across British Columbia are leading conservation efforts for birds, wildlife, lands, and waters, drawing on generations of place-based knowledge and experience managing their territories.

BY BRAELA KWAN

Braela Kwan is the Staff Writer at WBT.



The Fairy Creek watershed on Pacheedaht First Nation territory, 30 minutes from Port Renfrew on Vancouver Island, is critical habitat for the Marbled Murrelet. The small seabird's habitat extends along the Pacific coast of North America, but about one-quarter of the world's population lives in British Columbia.

The seabirds are in trouble. The province considers the Marbled Murrelet "blue-listed", meaning it is a species of special concern, while the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) deems the species "threatened."

Marbled Murrelets require coastal old-growth trees with lush, mossy branches to nest, and oldgrowth forest logging and fragmentation is the greatest threat facing this species. The integrity of the

Marbled Murrelet's habitat is at risk of fragmentation at Fairy Creek, where approximately two-thirds of the watershed is provincially protected as a Wildlife Habitat Area for Marbled Murrelets.

In August 2020, the Surreybased Teal-Jones Group logging company was preparing to plow a logging road into the Fairy Creek watershed to log the old-growth forest. But on August 10, Pacheedaht First Nation elders and youth, environmentalists, students, and forest defenders formed a blockade of encampments to cut off access for the logging company and protect the old-growth yellow cedars.

Bill Jones, an elder of the Pacheedaht First Nation, has made regular appearances at the blockade, volunteering his time to support the protestors. He said the Fairy Creek land holds spiritual significance to him, as his uncles used to pray in the area, as reported by CBC.

"It's difficult to be detached about this emotional issue. Our forests are in fact part of all human experience," said Jones in the CBC report.

Jones also expressed disappointment in the province's announcement in September excluding Fairy Creek from a list of old-growth deferral sites. The non-violent encampment is ongoing to this day.

While the Pacheedaht Chief and council have not made an official statement on the Fairy Creek blockade, the Pacheedaht First Nation have been leaders in protecting old-growth forest in their territory. In 2017, Pacheedaht First Nation proposed expanding protections of "Jurassic Grove" old-growth forest by 18 hectares, including giant



red cedars, Douglas-fir, and Sitka spruce trees. Old-growth forests and the surrounding coastal ecosystems have traditionally served as cultural and archaeological sites, burial grounds, and salmon harvesting areas for members of Pacheedaht First Nation.

Thousands of Years of Stewardship

Across the unceded, untreatied lands of British Columbia, biodiversity hinges on stewardship by Indigenous communities. Research from 2019 in the Environmental Science and Policy journal found that the total numbers of birds, mammals, amphibians and reptiles were highest on lands managed or co-managed by Indigenous communities. In fact, supporting, empowering, and collaborating with Indigenous communities, time-tested stewards of lands and waters, is necessary in addressing the global crisis of biodiversity loss. As the original inhabitants and stewards of the lands, Indigenous Peoples have generations of place-based knowledge, experience, and wisdom managing their territories. Indigenous stewardship can be enhanced by supporting and advancing Indigenous-led governance of lands and waters, co-management arrangements, and Indigenous land guardian programs. Jess Housty, executive director of Qgs Projects, a Heiltsuk-driven non-profit, and Heiltsuk First Nation councillor, offers perspective on environmental stewardship in an interview:

"We perform stewardship through the exercise of our rights and the practice of our culture out on the territory. We are intimate with our lands and waters. We don't thrive unless our lands and waters thrive. It's a matter of survival. Nothing is untouched; we are actively nurturing and defending the whole of our territory, and in turn, our Heiltsuk identity is nurtured and protected."

The last breeding pair of the red-listed Northern Spotted Owl in Canada lives in Spuzzum First Nation territory, 30 minutes north of Hope BC.

Provincial government biologists discovered the pair in 2019, but they did not alert Spuzzum First Nation immediately. Meanwhile, low-elevation old-growth forests in the Spuzzum Valley, critical habitat for the Northern Spotted Owl, are being logged. One block of forest has



Photo: Melissa Groo/MakeWay

"We don't thrive unless our lands and waters thrive. It's a matter of survival. Nothing is untouched; we are actively nurturing and defending the whole of our territory, and in turn, our Heiltsuk identity is nurtured and protected."

- JESS HOUSTY, EXECUTIVE DIRECTOR OF QQS PROJECTS AND HEILTSUK FIRST NATION COUNCILLOR

already been felled, while two more blocks auctioned off by BC Timber Sales are scheduled for logging soon. James Hobart, Spuzzum First Nation Chief, told *The Narwhal* that the provincial government should have alerted the nation about the breeding pair and the active nest when it was first discovered.

The decline of Northern Spotted Owls across BC is largely attributed to habitat fragmentation and destruction. Old-growth logging disrupts the forest connectivity which Northern Spotted Owls depend on.

Spotted owls are sacred to Spuzzum First Nation, and appear in myths passed down through generations. Chief Hobart told The Narwhal that the nation will host a ceremony in honour of the spotted owl and plans to defend the owl.

"Now that we know they're there, we will do whatever we can to protect them," said Chief Hobart in The Narwhal.

Across the province, land guardians are caring for lands and waters, under the leadership of Indigenous communities, including both elders and youth. The Guardian Program by Gitga'at First Nation, for example, practices a variety of monitoring, research, and survey efforts to protect the food security, ecological health, and community well-being of the Gitga'at Nation for present and future generations, including a seabird monitoring program surveying the diversity, abundance, and distribution of 45+ species of seabirds. The Gitga'at Nation's Guardian Program is one of many across the province and the country.

Research published in 2019 in the Biological Conservation journal builds on the land guardian narrative, specifying that a resurgence of Indigenous-led governance will drive "rapid, socially-just increases in conservation." The researchers note that while formal guardian programs across Canada are demonstrating tangible positive outcomes, Indigenous-led conservation efforts exist in communities without formal recognition, and their presence and

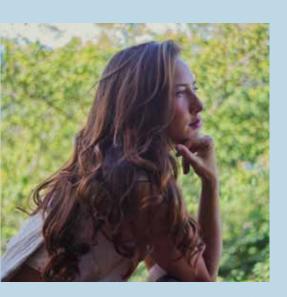


Photo: Maico Bruno Martinez/National Observer

"Indigenous guardians are on the front lines of a battle between unfettered development and sustainability. They strive to reconcile the differences between their own Indigenous laws, values and associated responsibilities, and the policies and practices of settler societies."

- EMILEE GILPIN, JOURNALIST

benefits are not always known or acknowledged beyond the community. The research determines "some of the most globally significant areas of conservation interest will increasingly not only be unjust, but also impossible, without Indigenous consent and leadership."

Journalist Emilee Gilpin reported on Indigenous guardians for The National Observer, imparting the following passage:

"Indigenous guardians are on the front lines of a battle between unfettered development and sustainability. They strive to reconcile the differences between their own Indigenous laws, values and associated responsibilities, and the policies and practices of settler societies."

Further Reading

"Supporting resurgent Indigenous-led governance: A nascent mechanism for just and effective conservation" in Biological Conservation (2019): https://doi. org/10.1016/j.biocon.2019.108284

"Vertebrate biodiversity on indigenous-managed lands in Australia, Brazil, and Canada equals that in protected areas Author links open overlay panel" in Environmental Science & Policy (2019): https://doi.org/10.1016/j. envsci.2019.07.002

"Indigenous guardians" by Emilee Gilpin in The National Observer (2019): https://www.nationalobserver.com/2019/05/01/ indigenous-guardians-turn-theirlaws-protect-coast

"Canada's last breeding pair of endangered owls found in valley slated for imminent logging" by Sarah Cox in *The Narwhal* (2019): https://theNarwhal.ca/canadaslast-breeding-endangered-spottedowls-in-bc-valley-logging/

"Interview: Jess Housty" in MakeWay: https://makeway.org/ impact-story/interview-jess-housty/

"Wildlife Superhighway" threatened by massive Roberts Bank Terminal 2 proposal

The existing marine terminal and coal port in Delta is already huge, noisy and environmentally destructive. Birds, fish and aquatic life currently battle various threats associated with port operations. Now a proposal to make the terminal facility even more enormous has the potential to create further havoc.

BY CHRIS ROSE

Chris Rose is a regular feature writer in Wingspan. He lives in North Vancouver. Photo of male Sandhill Crane, announcing his presence, by Andy Morffew - Own work CC BY 2.0. WikiMedia Commons.

Opposite page: Yellowlegs in flight by VJAnderson - Own work, CC BY-SA 4.0 Wikimedia Commons. As Canada continues its battle against both the aggressive COVID-19 pandemic and the increasingly alarming climate change juggernaut, federal cabinet ministers may soon decide the fate of an industrial megaproject proposed for North America's most environmentally diverse estuary on the Pacific Ocean.

Teeming in aquatic life, home to a vast array of shorebirds and migrating species, and for centuries an important part of local Indigenous culture, the lower Fraser River estuary, critics say, could be forever diminished if the Roberts Bank Terminal 2 proposal gets the green light from Ottawa.

Already home to a major BC Ferries terminal and causeway, the existing nearby Roberts Bank facility consists of a second causeway with road and rail infrastructure, a coal port, a tug basin and a threevessel marine container ship berth.

The nutrient rich area at the mouth of the Fraser River in Delta is included on a List of Wetlands of International Importance that is recognized by the United Nations.

The environmental stakes associated with building the new container terminal are massive, Birds Canada and Nature Canada representatives said in a commentary in The Narwhal.

"The area impacted by the proposed Terminal 2 project is home to more than 100 at-risk wildlife species. The [Fraser] delta has been designated as an internationally significant wetland as well as an important bird and biodiversity area," the commentary said.

"It's also a wildlife superhighway for pods of whales and endangered orcas, and our country's largest migration of wild salmon . . . Millions of migratory birds can be found flying along this corridor including nearly the entire global population of western sandpipers and other shorebirds that rely on

this vital feeding area when migrating between Alaska and Panama."

The commentary also noted that COVID-19 has put the nation in a reactive mode.

"Our government's immediate focus is on mobilizing short-term measures to secure the health and well-being of Canadians. When the time comes for our country to chart its recovery, these same principles must guide the response to projects that could harm the environment and human health."

Noting that the government has postponed a decision on the project until at least November, the commentary added the government will be facing diverging pathways when it is time to decide the fate of the proposal.

"The first is the path of the past: a nature-damaging infrastructure project that was conceived in the very-different economic circumstances of yesteryear. The other is a forward-looking path that incorporates the critical role of natural ecosystems in economic development and our health. This positioning requires a rethinking of how transport, industry and nature's needs can be best harmonized within this vital marine gateway," the commentary said.

"Nature Canada and Birds Canada urge the government to take the latter path, rather than approving the project for the sake of uncertain and costly economic gain. Roberts Bank is an opportunity for the Canadian government to chart economic recovery in a way that respects the interconnectedness between planetary health and a thriving economy."

The commentary added that the federal government should reject the Roberts Bank Terminal 2 project, which has been estimated to cost \$2 billion to \$3.5 billion.

"The more we learn about the origins of this pandemic and its links to the destruction of

natural habitat, the more apparent it becomes that biodiversity and natural ecosystems are integral to the survival of our future generations."

The Roberts Bank Terminal 2 proposal was initiated by the Vancouver Fraser Port Authority, a federal body responsible for the lands and waters making up the Port of Vancouver.

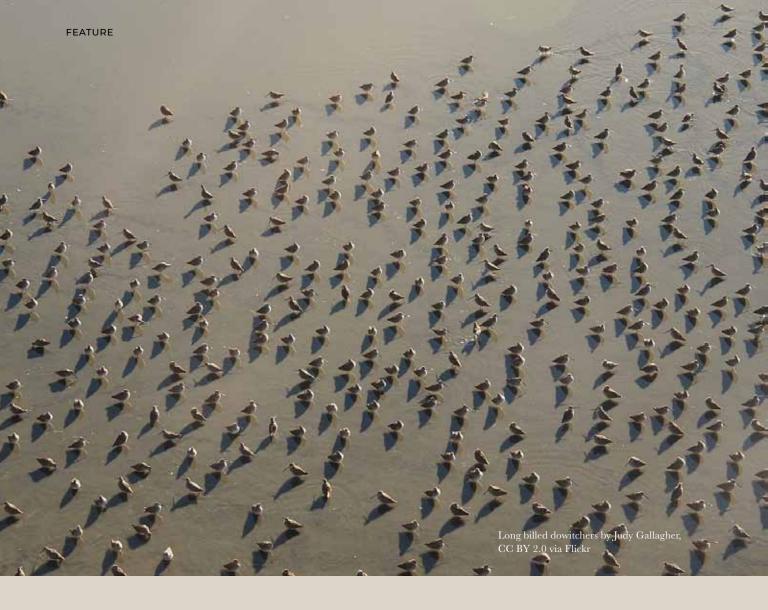
According to the Port, the largest in Canada, the project involves



building a new three-berth marine container terminal in deep, subtidal waters to minimize environmental effects.

"Roberts Bank Terminal 2 would play an important role in supporting Canadian businesses shipping goods to and from the rest of the world, and in ensuring Canada stays competitive and open for trade," the Port said.

"Based on our container traffic and capacity forecasts, the entire capacity of the Roberts Bank Terminal 2 Project is needed to



ensure Canada is able to meet trade plans and objectives through to the mid-to-late 2030s."

The Port Authority says \$1 in every \$3 of Canada's trade in goods outside of North America goes through existing facilities. In terms of economic benefits, the Port says, building the Roberts Bank Terminal 2 Project would create over 12,000 jobs. Once finished, operations would support over 12,000 jobs, including 1,500 jobs directly related to terminal operations, while adding about \$200 million in government taxes, and \$1.2 billion in GDP annually.

The Port also noted it has a federal mandate to protect the environment. The project would be funded

by the financially self-sufficient Port Authority and private investment. The proposal could begin in 2022 and take approximately six years to complete.

"As we continue work on the Roberts Bank Terminal 2 Project, we look forward to working with our partners and Indigenous groups as we take meaningful steps to protect the environment at Roberts Bank," the Port said, adding more than 77 studies by independent professional scientists, with input from Indigenous groups and regulators, were undertaken over four years and helped shape the environmental assessment of the project.

A 613-page Federal Review Panel Report for the Roberts Bank Terminal 2 Project, which was sent to Environment and Climate Change Minister Jonathan Wilkinson on March 27, was not as positive about the proposal.

The report's summary noted that the project would require the conversion of 177 hectares of intertidal and subtidal habitat on Roberts Bank to construct a new three-berth container terminal, expand an existing causeway and enlarge an existing tug basin.

"The Project would be situated immediately adjacent to Tsawwassen First Nation Lands, existing port infrastructure and close to the community of Tsawwassen and the City of Delta, British Columbia," the report said, adding the Fraser River

"The panel concludes that the project would result in numerous adverse residual and cumulative effects. The proposed offsetting plan for aquatic species, totaling 29 hectares, would be insufficient to compensate for the reduction in productivity associated with a Projectinduced habitat loss of 177 hectares of Roberts Bank."

- FEDERAL REVIEW PANEL REPORT FOR THE ROBERTS BANK **TERMINAL 2 PROJECT**

estuary is an ecologically productive and sensitive area of coastal BC.

"Roberts Bank is located on the Pacific Flyway for migratory birds and is adjacent to a provincial wildlife management area and an international Ramsar site," the summary added. "Some of the largest salmon runs in the world utilize and migrate through Roberts Bank as juveniles and adults. Roberts Bank also encompasses critical habitat for the Southern Resident Killer Whale listed as endangered under the Species at Risk Act."

"The panel concludes that the project would result in numerous adverse residual and cumulative effects. The proposed offsetting plan for aquatic species, totaling

29 hectares, would be insufficient to compensate for the reduction in productivity associated with a Project-induced habitat loss of 177 hectares of Roberts Bank. There would be significant adverse and cumulative effects on wetlands and wetland functions at Roberts Bank," the summary said.

"One of the ecosystem components that drives the high productivity of Roberts Bank is biofilm, which is consumed by western sandpipers and other shorebirds during their migration stopovers. The panel concludes that the project would not have an adverse effect on biofilm productivity and diatom composition. However, the panel cannot conclude with certainty about project effects on polyunsaturated fatty acid production in biofilm, a potentially critical nutritional component for western sandpiper. Due to the recent and still-emerging scientific understanding of biofilm, the panel is unable to conclude with reasonable confidence that the project would or would not have a residual adverse effect on western sandpiper."

The summary added the barn owl, a species listed as threatened under the Species at Risk Act, would be subject to significant cumulative effects, and there would be significant adverse and cumulative effects on Dungeness crab as well as oceantype juvenile Chinook salmon originating from the Lower Fraser and South Thompson Rivers.

Disrupting connections to sea for future generations

The people of Tsawwassen First Nation, scəwaθən məsteyəx^w, are "People facing the sea." Since time immemorial, Tsawwassen's way of life has reflected this, including their right to harvest fish and resources from the ocean. The Tsawwassen language Hun'qum'i'num embodies the lands and waters of their territory because it describes place names and their uses, an expression of way of life and identity. Tsawwassen First Nation members depend on their relationship with the ocean for health and wellbeing, for both physical and spiritual sustenance.

The Roberts Bank Terminal 2 expansion will be immediately adjacent to Tsawwassen First Nation reserve lands. The existing industry has already impeded Tsawwassen's access to water and the health of marine wildlife, in addition to adding light and noise pollution. As such, Tsawwassen members have concerns about how doubling the terminal size may further disrupt their connections to the sea and way of life for current and future generations.

In 2019, Tsawwassen First Nation submitted their closing remarks for the project's environmental assessment. The statement stresses the project's duty to recognize Tsawwassen's historical and current barriers to exercising their rights and culture and the ability to exercise these rights in the future, and to consider this project in the context of reconciliation.

Additionally, Tsawwassen's statement asserts there is a lack of evidence to support the Port's claim that the project will have minimal environmental consequences. Tsawwassen advises the Port and the provincial and federal governments to address the outstanding gaps in the environmental assessment and to develop robust mitigation plans relating to the project's impacts on Tsawwassen First Nation. This work is essential before the provincial and federal governments make their decision on whether or not to approve the expansion.

The direct concerns about the expansion are:

- The development of new infrastructure alienating Tsawwassen members from their territory,
- Contamination, dust, noise, increased traffic, and increased risks of accidents and malfunctions degrading mental and physical health of Tsawwassen people,
- Tsawwassen's ability to harvest fish and migratory birds,
- The decline of Tsawwassen's spiritual relationship with killer whales through disruption of critical habitat, and cumulative effects.
- The ability to teach Tsawwassen children about their culture due to environmental degradation.

Tsawwassen First Nation also recommends that the project should take on environmental enhancement by channeling funding and efforts toward the restoration of the foreshore and deteriorated marshland, as reported by The Narwhal.

"The port doesn't just lie in our territory, it is directly adjacent to our homes and where we fish and gather our food. Tsawwassen First Nation will feel the most impact among those who may be affected by a terminal expansion," said Tsawwassen Chief Ken Baird.

"These juvenile Chinook reside temporarily in the vicinity of the project and would be subject to migration disruption by the terminal footprint and project-related effects on the underwater acoustic and light environments," according to the summary. "The project would cause significant adverse and cumulative effects on Southern Resident Killer Whale through a small loss of legally-defined critical habitat, reduced adult Chinook salmon prey availability and a minor increase in underwater noise. In the absence of mandatory mitigation measures to reduce underwater noise from marine shipping associated with the project, there would be further degradation of Southern Resident Killer Whale critical habitat."

The summary also noted several Indigenous groups have traditional territories overlapping the project area and the marine shipping area.

"The project and the marine shipping associated with the project have the potential to change various aspects of Indigenous current use and cultural heritage resources. The panel concludes that the project would likely result in significant adverse and cumulative effects on the current use of lands and resources for traditional purposes by Tsawwassen First Nation and Musqueam Indian Band in the project area. The panel also concludes that marine shipping associated with the project would likely result in a significant cumulative effect on the current use of lands and resources for traditional purposes by Pacheedaht First Nation and Ditidaht First Nation.

"In addition, the project would cause significant adverse effects on cultural heritage for Tsawwassen First Nation and Tsleil-Waututh Nation in the project area. While the panel understands there would be relatively few ship movements associated with the project, each ship travelling through the shipping lanes causes an incremental effect on the ability of Indigenous groups to access sites where they conduct cultural activities. The panel concludes that there is an existing significant cumulative effect on cultural heritage and that any increase in ship movements would further contribute to this effect."

In conclusion, the summary said the proposal would cause effects on the quality of life of local populations, including health and quality of experience during commercial and recreational activities.

"The project would result in a residual adverse effect on daytime and nighttime visual resources and on outdoor recreation as well as a significant cumulative effect. Residual adverse effects of the proposed expanded Navigational Closure Area during both construction and operations would combine with the adverse effects of the existing Navigation Closure Area and cause a significant cumulative effect on the Area I commercial crab fishery."

The summary added that, during the operational phase, the project would result in a significant adverse effect and a cumulative effect on human health "based on predicted exposures to 1-hour average NO2 and other respiratory irritants."

There would also be a significant adverse cumulative health effect due to noise, the summary said.

"Elements of stress and annoyance related to light, noise and dust are already present in the Local Assessment Area and the project has the potential to exacerbate these conditions. The panel further concludes that the project would likely cause a significant adverse effect and a significant cumulative effect on agricultural land use due to the loss of a small area of land contained within the Agricultural Land Reserve."

After reading the panel report, Wilkinson appears to have doubts

about the proposed project. He has asked the Port Authority to come up with considerably more information that could help him make a decision, possibly in 2021.

"In order to effectively determine the feasibility of potential mitigating measures, as well as potential cumulative impacts to fish, fish habitat and species at risk, more specific information is required," Wilkinson wrote. "In particular, gaps in information remain as to how [the Port Authority] plans to offset impacts from the proposed project during the construction phase and throughout the project lifetime."

tidal flows and water temperatures of the lower estuary, further impacting birds and aquatic life.

"It's the tipping point."

Delta City Council also opposes the project, saying it would result in significant adverse effects on both the environment and the local community.

Requesting that Ottawa deny the environmental assessment certificate for the proposal, Mayor George Harvie urged Prime Minister Justin Trudeau to "use this opportunity to demonstrate leadership on climate change and biodiversity by working with the BC government to under-



Roger Emsley heads a group that has long fought the Roberts Bank expansion. Executive Director of the Against Port Expansion group, Emsley said 80 per cent of the Lower Fraser estuary's natural habitat has already been lost through development and pollution and allowing the Roberts Bank Terminal 2 proposal would further reduce the decline.

"I'm totally opposed to it," Emsley said. "Roberts Bank is unique in terms of its diversity."

He said building another manmade island in the area will change take a regional environmental assessment of the Fraser River estuary and the Salish Sea, and to develop a long-term environmental management plan to guide future conservation efforts and sustainable development in the region."

"Now, more than ever, we need to take bold steps to protect and preserve our natural environment and habitats that are critical for so many species, to challenge the 'business as usual' approach to development, and find new and flexible ways to support Canada's economy," Harvie said.



In 2014, Melissa Hafting noticed young people birding alone around Metro Vancouver. "I want to bring them together," she thought.

Thus began the BC Young Birders Program. The program is aimed at youth, aged 11-18, and seeks to show them birds they don't usually see at home. From 2014 to 2019, Melissa accompanied the youth on field trips across BC.

Today, the program is an official BC Field Ornithologists (BCFO) program (adopted in 2016). Through field trips led by Melissa and the Young Birder Award, the program has uplifted more than 30 talented and keen young birders all over the province, many of whom go

into careers in ornithology, biology, and conservation.

In a recent *CBC* documentary, *Rare Bird Alert* (which also features many of the province's young birders), Melissa speaks to the rising tide of youth in the BC birding world, and her admiration for them, "They're going birding, and they're very proud about it. I love that to see that it's cool to be different now. It's cool to care about the environment, and care about conservation, and climate change. These kids are now the cool kids." she said.

So without further ado, here is an introduction of some of the talented, passionate birders of BC!

BY ALICE SUN

Alice Sun is a science communicator, freelance conservation storyteller, and former Communications Coordinator at WBT.

Joshua Brown

Location: North Vancouver Favourite bird: Atlantic Puffin

Why do I love birds: To me, birds epitomise the wonder of nature: everywhere you look there is something special to discover, like Arctic Terns that migrate from pole to pole twice each year, swifts that can spend years on the wing before coming to land, or Pacific Wrens that fit hundreds of notes into a few brief seconds of song.

eBird: ebird.org/profile/ MzE5NDYw

Flickr: flickr.com/photos/ joshbrownbc

I'm a 19 year-old young ornithologist from North Vancouver, and I have been fascinated by birds since the age of three when my parents first took me to Reifel Bird Sanctuary for days out. I was mesmerized watching the ducks and Sandhill Cranes up close and my love of birds has grown ever since. In 2015 I was part of Birds Canada's Young Ornithologists' Workshop in Long Point, Ontario, where I learned how to conserve and appreciate birds in many new ways. I enjoyed my time there so much that the following year I returned for an internship and for a month dove deeper into bird banding, censuses, and conservation. I continue to band regularly and enjoy learning more about birds' lives from the study, and I was part of the team that banded many of the Purple Martin nestlings at Maplewood a few summers ago. I have been involved with eBird and Christmas Bird Counts for many years, as well as joining the BC Coastal Waterbird Survey more recently. After graduating high school last summer, I took a gap year to travel and work with bird conservation. I volunteered with a few projects in the UK, including at Spurn Bird Observatory in England as well as the largest seabird colony in Northern Ireland, where I was captivated by the antics of hundreds of Atlantic Puffins, my favourite bird. This fall I have started university at McGill studying wildlife biology.



Katya Kondratyuk

Location: Surrey

Favourite bird: I love all birds, but a bird that holds a special place in my heart is the Barn Owl

Why I love birds/birding: I like birds/birding because I love watching the behaviours of different bird species and of course I love being outdoors.

Ebird: https://ebird.org/profile/ Nzg2ODk0/world

Hello, my name is Katya, I am 15 years old. I've loved nature ever

since I was a toddler. I first got into birding after I saw a Barred Owl in my backyard. This led to my obsession with everything owls; I collected owl pellets, drew owls everywhere, read every book in the Guardians Of Ga'hoole series, and had several owl stuffed toys. Some time later, my mom bought me my first bird field guide. For the next few weeks, I was up in my room flipping through the pages and discovering the fascinating world of birds. Since that day many years ago, I have been heavily involved in the birding community. I regularly submit to E-Bird and attend the Christmas bird count every year. My favorite places to bird are Reifel Bird Sanctuary and Boundary Bay.





Sasha Fairbairn

Location: South Surrey Favourite bird: Emperor Penguin

Why I love birds: I am fascinated by their intelligence and evolution, inspired by their beauty and voices, and calmed by their presence while I am walking in either a city or a park.

Flickr: https://flic.kr/ ps/3vKQD4

I have had a love for birds and nature for as long as I can remember. Not only do I love their beauty and song, but I am also very interested in reading non-fiction literature about avian intelligence and other topics relating to birds. Having grown up in New Zealand, I did not fully appreciate how lucky I was to have all of these native species living practically in my backyard until I moved to Canada. Suddenly I was introduced to the "real" bird world with lifers, big years, and a lot of hard-to-distinguish species. I learnt most of the neighbourhood bird species by attending monthly bird walks, and to this day am more likely to participate in citizen science or to go on a local walk and take photos of species that I have seen a thousand times before than to chase rarities for my life list. That being said, it is still fun to paddle in these waters, and joining the BCFO Young Birders group allowed me to do exactly that, all the while meeting amazing birders and activists who inspire me to up my own game.



Liam Singh

Location: Victoria Favourite bird: Red-legged Kittiwake

Why I love birding: The reason I love birding is because the excitement it gives me when I find something new and rare, and it also lets me feel more connected to nature, allowing me to have a better appreciation for the environment and a new love to protect and conserve it.

Ebird: https://ebird.org/ profile/NDMxMDA5/CA-BC

Flickr: https://www.flickr. com/photos/128155881@N03/

I'm currently a Grade 12 student attending Oak Bay High School, based in Victoria, British Columbia. I've always had an interest in the natural world since I was little, but I first got into birding in 2013 after I returned from a trip to Madagascar where I met a ton of birders who helped sparked my interest. Soon after, I joined the Victoria Natural History Society, taking part in their bird walks, and my interest grew further. I joined the Rocky Bird Point Observatory and got up close and personal with passerines and participated in banding them, aiding the collection in data. Since then I have been banding there for over 6 years

One thing I have learned through my journey and through the development of my passion is that we need to be more aware of our surroundings and our impact on the natural world, including impacts on birds. I have also learned that spending time out in nature, searching and photographing birds, makes me feel grounded and happier in life, and I believe everyone should develop a passion for something in nature, whether that be fungi, plants, insects, or birds.

Rebecca Reader-Lee

Location: Victoria Favourite bird: Northern Saw-whet Owl

Why I love birding/birds: It's very exciting to constantly be reminded of the sheer amount of life out there that most people just take for granted.

Instagram: @rebeccasnaturepics iNaturalist: @rebeccareaderlee

I have been a birder, photographer and nature enthusiast pretty much since I could walk! My parents and my older sister Emma are also avid birders, so it made sense that I would join them. I had the opportunity to join the "Western Teenagers" team for the Meadowlark Festival big day in the Okanagan for a few years as well as being a part of Melissa Hafting's Young Birder Program, both of which helped me create many meaningful relationships with other young birders in BC. I have volunteered at Rocky Point Bird Observatory for about 7 years with their MAPS (Monitoring Avian Productivity and Survivorship) banding and fall migration banding including Northern Saw-whet Owl banding, which has given me a lot of experience in field science as well as learning a lot about birds that aren't possible through binoculars, like sexing and ageing birds. I was also very fortunate to be able to attend Long Point Bird Observatory's Young Ornithologist's Workshop in 2019, which allowed me to explore ornithology even further. Apart from birds, I also have a passion for finding many other creatures, including reptiles, amphibians, and invertebrates such as spiders and moths.



Bridget Spencer

Location: Vancouver Favourite bird: One of my favourites is the Violet-green Swallow

Why I love birding: I love that birding allows me to spend hours outdoors, and I also love a good identification challenge.

eBird: https://ebird.org/ profile/NDQ4MzUz/CA-BC

I began birding in 2013, inspired by my nature-loving neighbours who took my sister and I on trips to Reifel Bird Sanctuary to feed the ducks and chickadees. I soon took an interest in the birds in my neighbourhood, and found myself wanting to identify the different species visiting my bird feeders. Within the following year I began using eBird, and found it to be a great resource for tracking the birds I was seeing. I take a keen interest in birding under-birded hotspots, filling in the bar charts and finding new species for them. I have also taken part in numerous Christmas Bird Counts and a Fraser IBA count. The totals from these counts are compiled with data from years of previous counts, in order to grasp the changing populations of birds in our area. My hopes are that these contributions will help to inform conservation efforts in order to protect the species I am so passionate about.



Birding News from around BC



CHRISTMAS BIRD COUNT

Started in 1900, the Christmas Bird Count is North America's longest-running Citizen Science project. Counts happen in over 2000 localities throughout the Western Hemisphere. Each Christmas Bird Count is conducted on a single day between December 14 and January 5. Counts are carried out within a 24-km diameter circle that stays the same from year to year. They are organized, usually as group efforts, at the local level, often by a birding club or naturalist organization. You can find one near you. https:// www.birdscanada.org/apps/cbc/ mapviewer.jsp.

Selected locations and dates:

- North Vancouver, Vancouver & Victoria: Saturday, December 19
- Ladner: Sunday, December 20
- White Rock: Sunday, December 27
- Duncan: Friday, January 1, 2021
- Pitt Meadows: Saturday, January 2, 2021

Counts may be cancelled due to updated COVID-19 restrictions. Do you want to learn the basics of Bird ID-ing? Visit to register: https://bit.ly/birdIDbasics

Help create urban pollination patches

The Vancouver Butterfly Way project is an initiative that helps create pollination patches in communities and spaces such as yards, balconies, green spaces and schools. This endeavour has taken off across the Lower Mainland since its inception in 2019. The program strives to introduce Indigenous plants, shrubs and flowers to support struggling pollinator populations. Because of pesticides, environmental factors, climate change and ever-expanding neighbourhoods, birds, bees and butterflies have decreased. By introducing more flowering native species, the project hopes to increase the numbers of pollinators. A secondary benefit found was that neighbours in these communities are meeting and connecting with one another and spending quality time outdoors. https://vancouversun.com/news/ local-news/point-grey-neighboursmeet-and-greet-while-helping-beeswith-what-they-eat,



Anise Swallowtail butterfly by Rob Alexander. Top of page: Purple Martin by John Lowman.



Coyote by Sue Flecker

Wilderness groups concerned as endangered species in BC hit an all-time low

BC wilderness groups state that minimal progress has been made since 2017, when the NDP promised funding for science, and commitment to wildlife management programs. Since the promise, numbers of Steelhead salmon, caribou and other animals have drastically dropped. This comes after a 65% decline in provincial funding for wildlife and habitat protection over the past 20 years.

The BC Wildlife Federation has pressured provincial parties to share their plans on restoring these sectors and their strategy moving forward. The previous NDP and Liberal leaders have done very little to help restore the dwindling numbers of salmon, caribou and other animal populations. They seem to be headed towards meaningful actions, by recently establishing the Wild Salmon Advisory Council and creating a \$142-million Salmon Restoration and Innovation Fund. https://vancouversun.com/ news/b-c-election-wildernessgroups-sound-alarm-as-caribousteelhead-and-salmon-hit-new-lows

Western Hemlock Looper Moths reappear

This summer, several areas of Metro and the Sunshine Coast saw dramatic swarms of looper moths, a species known to attack the foliage of hemlocks, Douglas firs, and red cedars. This phenomenon is a result of a two-to-three-year outbreak cycle which was significantly larger than the previous year. There are notable impacts to forest and watershed ecosystems, particularly Capilano, Seymour and Coquitlam. The damages have affected around 1,500 hectares of forest from sporadic trees to large patches in and around BC.

Looper moths attack hemlock and other coniferous trees by eating their needles and in some instances can strip entire trees. This can cause trees to die which has a direct impact on both the forest industry and watersheds. Additionally, cohesive and healthy forest ecosystems are needed to protect drinking water systems. The warming of our climate allows these moths to survive through the winter which directly results in larger outbreaks. Scientists are concerned that these outbreaks could kill and damage more trees than our forests can naturally restore. https://vancouversun.com/news/north-shorehit-with-another-outbreak-of-western-hemlock-looper-moth

Ban rodenticides to protect city's wildlife

Municipalities in the lower mainland continue to propose bans on certain rodenticides, known as anticoagulants, that have shown to negatively impact local wildlife. These rodenticides cause internal bleeding and can lead to a pain-

ful death. Additionally, when other animals eat the rodents that have been poisoned by these pesticides, they can cause secondary poisoning and in some cases, death. Wildcats, snakes, birds of prey (including local owls) and coyotes are some of the animals most commonly affected. The campaign emerged out of concerns from local North Vancouver residents Yasmin Abidi and Elise Roberts, including other Wild Bird Trust members, who petitioned the District of North Vancouver before expanding across the North Shore and the lower mainland. Several local municipalities are also hoping for a province-wide ban on these rodenticides. They also want to provide information and educate residents and businesses on alternative measures that are less harmful. https://www.newwestrecord.ca/ news/new-west-bans-rat-poisonson-civic-lands-1.24211948



(Dead) Birds for Science

We're collecting bird carcasses in southwestern BC until Spring 2021 for conservation research. Please get in touch if you wish to contribute carcasses:

- @FraserDeltaIBA
- @BirdsCanada BC
- @WildResearch



It seems to me that conservation and bird photography should go hand-in-hand. It is undeniably true that many wildlife photographers enjoy creating esthetically pleasing photos for their own sake. This is certainly true for me. But it is also a fact that when posting a photo on social media, I hope to tell a story, preferably one that speaks to the conservation status or ecological role of a specific species at the local, national, or global level. You have no doubt read other articles in these very pages that have argued the same thing.



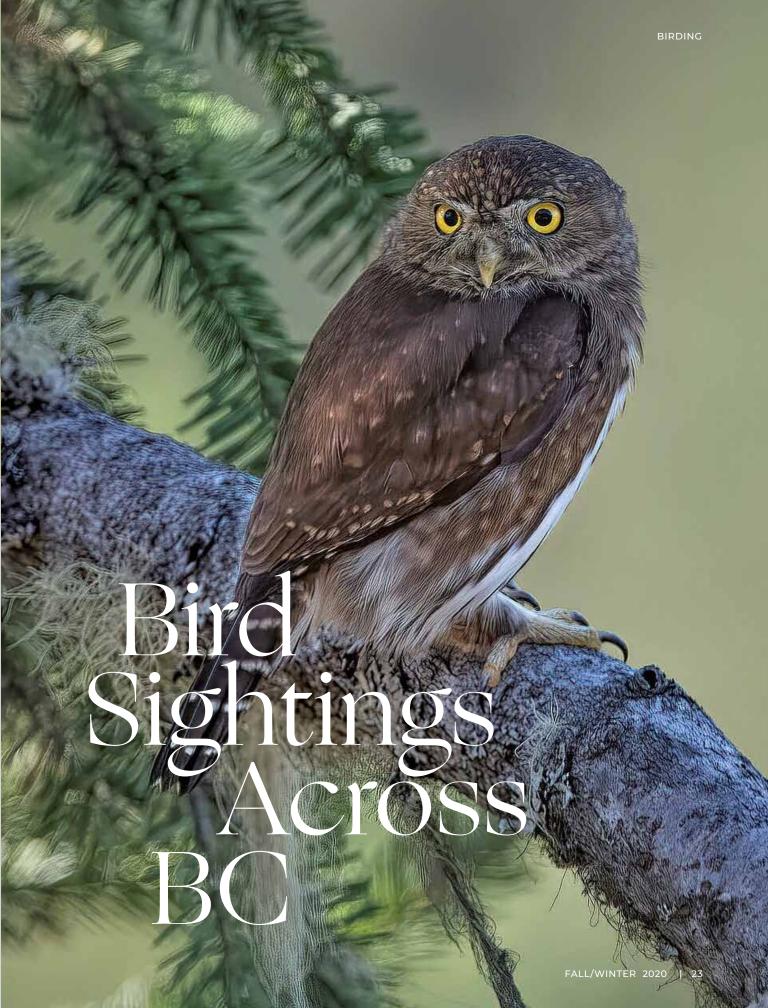
In this article, I would like to make an additional point: We are at an interesting crossroads with respect to conservation photography. After decades of participatory monitoring activities, including monthly bird counts held at Maplewood Flats and elsewhere, scientists are now able to use the data collected to make more precise determinations about the overall and local conservation status of individual species. This, in turn, could provide greater opportunities for wildlife photographers to illustrate - sometimes quite dramatically - the results of these studies. Providing compelling images to illustrate conservation studies and science is one of the more effective ways that we, photographers, can use to make the results tangible and visible to the general public, especially if they already admire birds for their grace and beauty.

The text I use to describe both of the pictures selected for this article can hopefully illustrate my point. The first photo features sev-

BY PIERRE CENERELLI

Pierre Cenerelli is an avid birder and award-winning photographer who has been known to haunt the trails at Maplewood Flats

eral young Barn Swallows sitting on a branch, with one of them giving an impressive yawn. But I think it is important to add that, while the global conservation status of this species is considered to be of "Least Concern," the Canadian population of this species was deemed in 2011 to be threatened. The second photo of a raft of Barrow's Goldeneyes surfing the waves is an excellent occasion for me to point out that the Burrard Inlet International Bird Area, where this photo was taken, was created precisely because of the key importance of this region to the global population health of this and other marine bird species. In both cases, I'm hoping that viewers will appreciate both the beauty of the species illustrated and the important conservation story they can illustrate.













The Birds at a Social Distance

Spring birding was just what the doctor ordered, a pastime where self-isolation was encouraged. An escape to the Maplewood Conservation Area became an almost daily routine to clear the mind and find some positive news.

Spring birding was just what the doctor ordered, a pastime where self-isolation was encouraged. An escape to the Maplewood Conservation Area became an almost daily routine to clear the mind and find some positive news.

As spring migrations go, 2020 will be a memorable one for certain. A quick early walk just before the COVID-19 signage went up revealed a roosting Northern Saw Whet Owl tucked into a Hemlock Grove. The new signage would

BY ROB LYSKE

Rob Lyske is an avid birder, his interest sparked 20 years ago while on a trip to South Africa.

prove to be helpful in concealing the little owl, as the new clockwise trail signage would make it unlikely for it to be seen unless walking in a counter-clockwise manner.

April started off with a Rusty Blackbird sighting by Sue Flecker



on the 4th, and seen again the following day. It was a very busy spring this year, with a couple significant migration 'fallouts' (a large group of exhausted birds forced to a rest stop to refuel before their final destination due to severe weather conditions). The first fallout dropped hundreds of Warblers into the sanctuary, mostly Yellow-Rumped but also a high count of 15 Townsend's Solitaire, definitely not living up to their name. The second fallout was another incredible movement of birds, this time the spectacular colour of Western Tanagers numbering over 650 along with more than 50 Warbling Vireo. Amongst the mind blowing numbers in the fallouts were an incredible lineup of local rarities including a Solitary Sandpiper found on the Park Street marsh by Mark Stevens.

On successive days at the beginning of May a Dusky Flycatcher

and Lewis' Woodpecker were seen at the edge of the east salt marsh. A Western Kingbird briefly showed there on May 10th and 2 Yellow Headed Blackbirds did a fly-by May 19th. On May 22nd Maplewood's checklist got an addition with a flock of 54 Sabine's Gulls. The flock of gulls delighted viewers for most of the morning out on the water beyond the Osprey nest. Yet another very uncommon sighting on May 27 was when a pair of Redhead landed near McCartney creek where they spent nearly 2 weeks.

June usually brings the last of the migrants for the season such as a Gray Catbird and a few Lazuli Bunting. There was also an unusual nesting attempt when a female and first year male Bullock's Oriole had their nest raided by the newly 'lumped' American Crows (formerly Northwestern Crows, now considered the same species). A bit disappointing as this would be the first time for this species at the conservation area.

Red Crossbills started to show up again after several months' hiatus to keep things interesting during the doldrums of summer. The shorebirds started to trickle in on their south-bound migration in July, first Semi-Palmated, Least and Western Sandpipers and later on Pectoral and Baird's Sandpipers as well as a Semi-Palmated Plover. One of the more locally unusual shorebirds was Mark Stevens sighting of a Sanderling on Aug 8th. Mid-August a young Barred Owl delighted visitors at the entrance, perched on the nursery gate. Sue Flecker got on another streak of great sightings with an American Redstart August 25th and then along with Mark Stevens had a Parasitic Jaeger fly in near the mouth of McCartney Creek September1st.



September 3rd a Franklin's Gull was found by Alex and Nicole Marchi, this diminutive gull was seen several times over the next few weeks. They also were lucky to view 3 Parasitic Jaegers on September 15th. A few days earlier a Northern Waterthrush showed up on the edge of East Pond and a Mourning Dove perched briefly in the east saltmarsh on the 20th.

Another first for Maplewood came on the morning of October 7th when Sue Flecker managed some photos of a California Scrub Jay with a few Steller's Jay. The California Scrub Jay has been gradually moving northward in range and was a welcome addition to the MCA checklist. Lastly, a Thanksgiving treat, a Palm Warbler showed up on the 12th of October. It was seen briefly in the morning before spending the rest of the day flitting through the maple trees in the parking area for many enjoying the holiday outdoors.





When You Walk...Stop Often and Listen

In spring, we can listen in the early morning as birds greet the rising sun - it's called the "Dawn Chorus". However, there are also many birds to listen for in fall and in winter, like the croak of a raven, scream of a red-tailed hawk, chirping of an eagle, or the hooting of an owl – and don't forget the lovely "hey sweetie" song of the chickadee. Maybe the sounds are the splashing of otters or the chirping of a squirrel. Recently, I heard what I thought was (I was sure of it) an Eastern Grey squirrel (I've heard them many times) but when I looked, it was a Cooper's Hawk mimicking (imitating) a squirrel. It fooled me – was the hawk trying to fool a curious squirrel to come closer to look for the "intruder"? The Cooper's hawk regularly hunts grey

squirrels - especially large stronger females (female birds of prey - eagles, hawks, owls, etc) are larger and stronger than males. Yes, I think that the hawk was trying to trick the squirrel to come closer...and closer... in order to catch it for dinner!

Mimicry (imitating) of songs and calls is not unusual, especially in birds. For example, the Steller's Jay does a beautiful imitation of a Redtailed Hawk (many of us have been fooled!)

John Neville, noted Naturalist and recorder of nature sounds, recorded a Song Sparrow imitating a Spotted Towhee. Perhaps the most famous (and skilled) species at mimicking all kinds of sounds - even music – is the European Starling – it's amazing!

BY AL GRASS.

Al Grass is a legendary BC Parks naturalist who has led monthly bird walks at Maplewood Flats.

Photographs by Rob Alexander, avid birder and active WBT member who frequents Maplewood Flats.



Wild Birds of BC Word Search

T	S	Α	U	Е	Н	Υ	Т	S	W	Α	Н	Υ	L
R	P	N	G	С	P	Α	U	T	0	W	L	R	Α
Ε	0	I	N	Н	K	D	R	Ε	R	C	R	0	W
K	T	В	R	I	W	R	K	L	R	Е	M	В	Р
С	T	0	K	С	Α	I	E	L	Α	N	Α	Α	С
Ε	Ε	R	L	K	Н	В	Υ	Ε	P	Ε	L	L	L
P	D	R	J	Α	L	G	٧	R	S	٧	L	D	Υ
D	T	L	U	D	I	N	U	J	G	Α	Α	E	P
0	0	Α	N	Ε	Α	Ι	L	Α	N	R	R	Α	Α
0	W	E	C	E	Т	M	T	Υ	0	P	D	G	G
W	Н	D	0	F	D	M	U	Т	S	N	D	L	G
M	Ε	Е	R	T	Ε	U	R	0	Α	Α	U	Ε	D
R	Ε	D	D	W	R	Н	Ε	0	K	Ε	С	R	R
Ε	Н	C	N	I	F	L	J	R	S	T	K	Υ	С

FINCH TURKEY VULTURE HUMMINGBIRD SONG SPARROW OSPREY CHICKADEE WOODPECKER REDTAIL HAWK SPOTTED TOWHEE ROBIN OWL STELLER JAY JUNCO BALD EAGLE RAVEN MALLARD DUCK CROW

Play this puzzle online at : https://thewordsearch.com/puzzle/1667291/



Coast Salish Plants

The two languages are the languages of the Squamish, and the Tsleil-Waututh and Musqueam and other Coast Salish Peoples. It then can also be identified by the English name and the scientific/ Latin name. The description is part of the many uses, and some nations may have different uses as well.



we7úp q^wə?áp Pacific Crabapple Malus fusca

This bitterly tart fruit tree is a well-known staple of the west coast. Found in wetlands and damp moist soil, this tree can often be found near streams, rivers and estuaries. The fruit blooms in bunches of 4-6 and are bright red and yellow in colour. Many confuse the blossoms in early spring for those of cherry blossom trees, and in fact, they do resemble one another with light coloured fragrant delicate petals. The bark of the plant is also medicinal and was seen to help with digestion issues. Another use is to help treat wounds and to wash the eyes of debris.

Photo: Pacific Crabapple by A Gude. CC BY-SA 2.0).



smelhx wel mál<mark>ž</mark>wal Indian plum Oemleria cerasiformis

This plant is one of spring's earliest bloomers. Sproutings vibrant green leaves and following with small white flowers, this plant is a great early source of food and nutrients for pollinators such as bees, butterflies and hummingbirds. In early summer the small purple fruits smart to emerge and with them, many more animals begin to enjoy the early season's bounty. The fruits are small, about the size of a pinto bean and very tart with a large seed inside. This plant can grow just about anywhere and prefers a shady spot under the tree canopy with not too much direct sunlight. They have many medicinal uses in Indigenous cultures but due to the possible trace of toxins, it's always suggested to learn more about the plant before ingesting.

Photo: Indian Plum by Maddie Edmonds.

In order Skwx wú7mesh Həndəminəm **English Common Name** Latin Name

Indigenous use, from time to gather, details on leaves, flower, or other details of identification, and more.



st'ákw'em tq^wə́m **Thimbleberry** Rubus parviflorus

This sweet and soft berry is often a favourite of humans and critters alike. The berries are often mistaken for wild raspberries as their colour and shape bode similarities. But this fruit is much sweeter and has an almost velvety fuzzy exterior. In early spring new shoots emerge from the ground and are juicy with a light, sweet flavour. Flowers begin to emerge in early to mid-summer and fruits follow behind in July and August. In fall, their golden coloured leaves add to the beauty of surrounding nature. Their leaves have been found to be a safe and effective for women's health. Birds, bees and many other critters love these berries and because of their soft exterior, they make a yummy lunch for many pollinators and birds alike!

Photo: Rubus parviflorus - Thimbleberry by Thayne Tuason. CC-BY-SA 4.0.

Cultural and ecological management planning at Maplewood Flats

"Our vision is that the site reflects a resilient and thriving ecosystem where Tsleil-Waututh culture and use is prevalent, and the public is experiencing, learning about, and being inspired by these lands and water."

BY BRAELA KWAN

Braela Kwan is the Staff Writer at WBT.

Since 2017, the 320-acre Conservation Area at Maplewood Flats has been the subject of a planning process to build the foundation for a *Habitat and Cultural-Use Plan*. The outcomes will be a guide for the next decade's ecological and cultural needs of Maplewood Flats.

WBT's Board of Directors initiated a paradigm shift when they embarked on an ecological research methods framework to address place-based redress with Tsleil-Waututh Nation along with addressing emerging ecological stressors. Prior to 2017, engagement with Tsleil-Waututh on conservation efforts at Maplewood Flats was not a priority. This new intersection of reconciliation, cultural continuity, and ecological restoration is formally reflected in the research methods that grounds developing the new management plan. The Board recognized the urgency of engaging with Tsleil-Waututh Nation and the need for resources, capacity, and focus to reflect Tsleil-Waututh values and goals at Maplewood Flats.

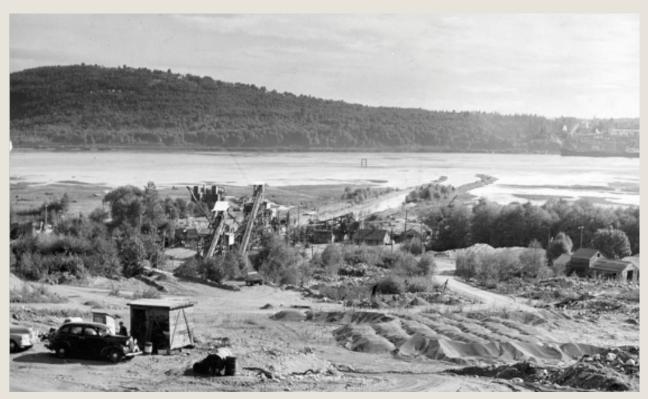
The plan has five goals and objectives:

- Goal 1: Conserve, restore, and monitor biodiversity and ecosystems while maintaining cultural continuity.
- Goal 2: Strengthen the relationship between the Tsleil-Waututh Nation and WBT to support cultural continuity, restoration, and conservation efforts.
- Goal 3: Strengthen partnerships.
- Goal 4: Foster compatible public access and opportunities to learn.
- Goal 5: Complete operational requirements and projects to facilitate public engagement enjoyment and protection of the environment.

Back in 2017, Chloe Hartley, a local graduate researcher reached out to WBT asking if she could complete her M.Sc. research on ecological restoration at Maplewood Flats. The timing was perfect. "It was one of those serendipitous moments," said Hartley, who co-led the initial habitat and cultural-use planning with Irwin Oostindie, WBT's President. Oostindie had been doing graduate-level course work at SFU's Resource & Environmental Management considering resource co-management between Indigenous and settler communities, as well as the effects of place-based reconciliation methodologies.

In the summer of 2017, Hartley surveyed the relative abundance of plants at Maplewood Flats, complete with an analysis of bird presence in relation to different plant species such as blackberry. She also supported post-secondary student projects and restoration research. Once she completed her research, she started volunteering with WBT and has served as Habitat Committee Co-Chair.

From 2018-2020, a series of member and public-access workshops took place to consider the past, present, and future of Maplewood Flats. The planning



Deeks-McBride Sand and Gravel Company looking from the site south from the Dollarton Highway and Burrard Inlet. Circa 1950. Photo source: North Vancouver Museum and Archives.

has identified both cultural and ecological stressors at Maplewood Flats, which are inherently connected. Restoring Tsleil-Waututh access, use, and direction in the management of the site is a primary objective for addressing cultural goals at Maplewood Flats. Meanwhile, the ecological stressors at Maplewood Flats include invasive species, climate change, site contamination, reduced wildlife corridors, the industrialization of Burrard Inlet, and increased site visitation. Due to the combination of these stressors, the site is at a critical point.

"If we don't intervene at this point, the low native plant diversity may persist along with corresponding lower wildlife diversity because of that," said Hartley.

"The vision for the Hahitat and Cultural Use Plan is not for it to merely be an environmental management plan, but that it recognizes that humans and nature go hand in hand. [To] properly care for this site,

we really need to address our relationship with Tsleil-Waututh Nation and Coast Salish Peoples as the first stewards of this land," said Kirsten Bradford, former habitat plan project coordinator in summer 2020.

Parallel to this planning work from 2017-2020, it's worth noting that the Wild Bird Trust's annual budget grew from \$120K to \$420K. This change enabled staffing and systems to address challenges, increase restoration work, activate the Corrigan Nature House, grow the nursery, and build a participatory democratic organisation. The planning activities have helped the organization consolidate its policies, worldviews, and understandings of this particular site on the edge of the Salish Sea. Member participation and engagement is becoming more diversified, and paid staff support coordination and engagement. Active members can participate in educational programming, ecological restoration initiatives,

and site maintenance (including work on fencing, planting, and soil remediation).

The planning work now moves into relationship building and developing initiatives with Tsleil-Waututh Nation. The WBT is committed to planning and engagement which includes developing, producing and broadcasting cultural activities and educational programming, introducing interpretive language and culture signage, and increasing opportunities and synergies with Tsleil-Waututh Nation systems and community. Cultural heritage and ecological restoration efforts on site will reflect Tsleil-Waututh cultural values, resulting in more relevant and biodiverse plant and bird communities, and advancement of WBT mandate.

If you would like to become an active member involved in this work, reach out to volunteer@wildbirdtrust.org for more details.



Coast Salish Plant Nursery Demonstration Garden

As part of the mission to develop ecological and cultural resilience at Maplewood Flats, Wild Bird Trust is beginning to plan and secure funding for a Demonstration Garden project and Interpretive Signage collection that will utilize native plants propagated from our own Coast Salish Plant Nursery.

As the name suggests, the garden will demonstrate native plant communities that would be prolific at the flats had the recent history of logging, land "reclamation" (aka infilling) and industry not shaped the upland portions of the conservation area. That is to say, the demonstration garden is a restoration project through conscious environmental planning and landscape design.

A major goal of the project is to promote awareness of the Tsleil-Waututh's timeless presence on Burrard inlet and to incorporate traditional ecological knowledge in the management of the upland landscape overlooking the inlet. A description of these techniques will be translated and displayed in Coast Salish languages on signage.

The garden will further demonstrate and support educational programming put on by the Wild Bird Trust by providing materials (e.g. food for birds, pollinators, medicinals; dye plants), supporting teachings about relationships and purposes, linking people to seasonal and cyclical nature of the plants, as well as educating people about the benefits of growing native plants and providing examples of layered companion planting designs and aesthetics that can be achieved using plants for sale in the Coast Salish Plant Nursery.

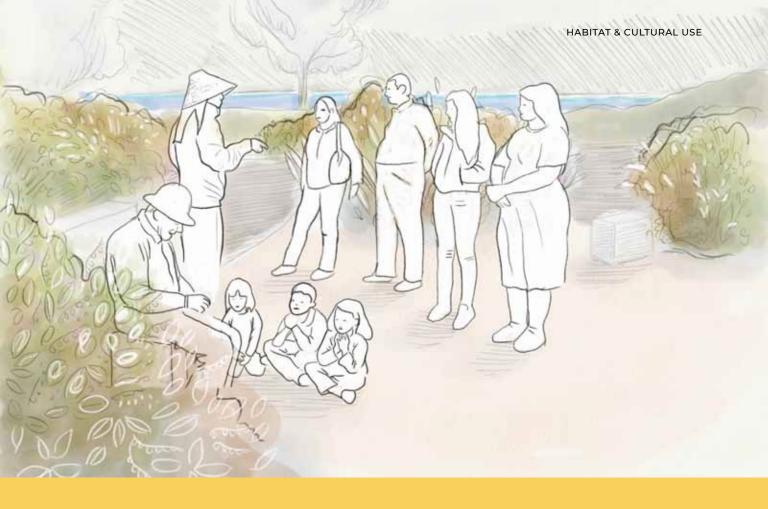
The project kick-off will involve soil testing and remediation where necessary, removal of invasive species, and landscaping work including site and soil preparation in advance of replanting a diversity of indigenous flowering plants, fruiting shrubs, and trees. Importantly, we will be seeking the advice an opinion of local of Tsleil-Waututh and Coast Salish com-

BY TAYLOR BOISJOLI

Taylor Boisjoli is an award-winning landscape designer with work focused on heritage/archaeologically sensitive sites in remote First Nations communities, shoreline restoration, and drought tolerant planting design. Architect's drawing by Taylor Boisjoli.

munity members referred through TLR staff and Squamish ethnobotanists Senaqwila Wyss and Cease Wyss, as well as other stakeholders including Wild Bird Trust members and patrons. The engagement will be structured into a phased design charette that will take place in the winter of 2020/2021, before shovels are in the ground by Spring of 2021.

Finally, the demonstration garden will take form about half way up the viewing corridor; a portion in the shaded woodland area where we can highlight shade-loving species, while another larger portion will be planted in the upland area just South of Osprey point.



Coast Salish Plant Nursery Expands with New Funding

Alongside the progress of the Demonstration Garden project, WBT is thrilled to announce new opportunities to expand the Coast Salish Plant Nursery at Maplewood Flats thanks to funding from the Vancouver Foundation, under the federal Investment Readiness Program. The parallel growth of these projects at Maplewood Flats will maximize WBT's capacity through crossover across both projects, such as joint planning for user experience and plant profiles.

Established in the mid-1990s, the Coast Salish Plant Nursery fulfills the Wild Bird Trust's social enterprise

and ecological restoration objectives. Firstly, the nursery is a social enterprise, in which all nursery profits support habitat restoration and educational programming on Coast Salish culture and ecology, reinforcing WBT's mandate. Framing the nursery in this way allows WBT to confront and reject colonial norms in business and operate outside of the traditional demands of an economic bottom line.

Furthermore, local plant nurseries bolster restoration efforts by fostering the re-establishment and proliferation of native plants. Planting species that are native to the region encourages areas to return to their natural states one container, balcony, or yard at a time. Ecological restoration promotes biodiversity, ecosystem stability, resiliency, and adaptability while supporting wildlife and habitat connectivity.

Over the years, the largely volunteer-run nursery has brought in

BY ERIN KENDALL

Erin Kendall is the Nursery Project Manager and is an expert in ecological restoration, having worked throughout BC on forest and riparian projects. Illustration by D'arcy Hutton.

modest but helpful returns to support restoration work on site, as well as providing a supply of propagated plant stock. For the first phase of the Nursery Growth project, the WBT is considering different business models and appropriate scaling, conducting market research, undertaking program and product development, building brand development, contemplating marketing strategies, and taking on small pilot contracts with restoration partners. WBT is prioritizing the relationship with Tsleil-Waututh Nation in this groundwork, with an eye to a possible future economic partnership.

Human Impact on the Mudflats

Maplewood Flats is a unique ecosystem tucked away in the largely industrialized Burrard Inlet. The Flats are an important stop over and home for many species providing critical habitat and foraging opportunities. Hosting diverse bird habitats and beautiful scenery amidst the industrial inlet, it's no wonder birders, outdoor enthusiasts and curious visitors all flock to the site. Site visitation is expected to be 80,000 people this year and is increasing annually.

Rising visitation means increased ecological stress to the habitat and animals that call Maplewood Flats home. Specifically, increased foot traffic off of the designated trails and on to the mudflats affects the physical structures of mudflats, the algae, marine invertebrates and shore and water birds.

Trampling due to foot traffic can decrease the complexity of a mudflat, altering the reproduction and distribution of microalgae (Rossi et al., 2007). Compaction of the sand

can change the exchange rate of nutrients and oxygen between the sand and overlying water which alters the conditions for all plants and animals (Rossi et al., 2007). Seagrasses are uprooted and marine invertebrates crushed due to human foot traffic. Although the mudflats may seem simply like an expanse of mud and water, they are teeming ecosystems full of complex processes and biological interactions. Walking across the mudflats disrupts all of these interactions, despite the fact that we can't directly see our impact.

Human disturbance on mudflats is detrimental to birds feeding and nesting behaviours. Stamping out algae, seagrass and marine invertebrates lowers food availability for hungry birds. Ramli & Norazlimi (2017) found that upon human disruption 36% of birds on the Jeram mudflats of Malaysia stopped feeding and flew away, 23% stopped feeding and ran away, 22% stopped feeding and stayed alert and 19%

BY KIRSTEN BRADFORD

Kirsten was Habitat Plan Writer at WBT this summer, and is Research Assistant at DFO

continued feeding. Reduced food intake and higher energy expenditure can reduce a birds ability to form fat reserves and fulfil the annual cycle of moult, migration and breeding (Ramli & Norazlimi, 2017). Finally, human disturbance on mudflats can result in the loss and degradation of high tide roosting sites, directly impacting shorebird populations (Ramli & Norazlimi, 2017).

Clearly, the mudflats at Maplewood Flats are a fragile and critical habitat worth conserving. In order to care for this natural ecosystem amidst industrialized Burrard Inlet, we need to work together to decrease the degree of human impact on the mudflats.

Birds were disturbed 80% of the time by off-leash dogs...[and] jumped to 93.8% when both humans and dogs left marked boardwalks and paths to stroll into undisturbed areas.

Off-leash dogs on beaches and trails harm bird nests

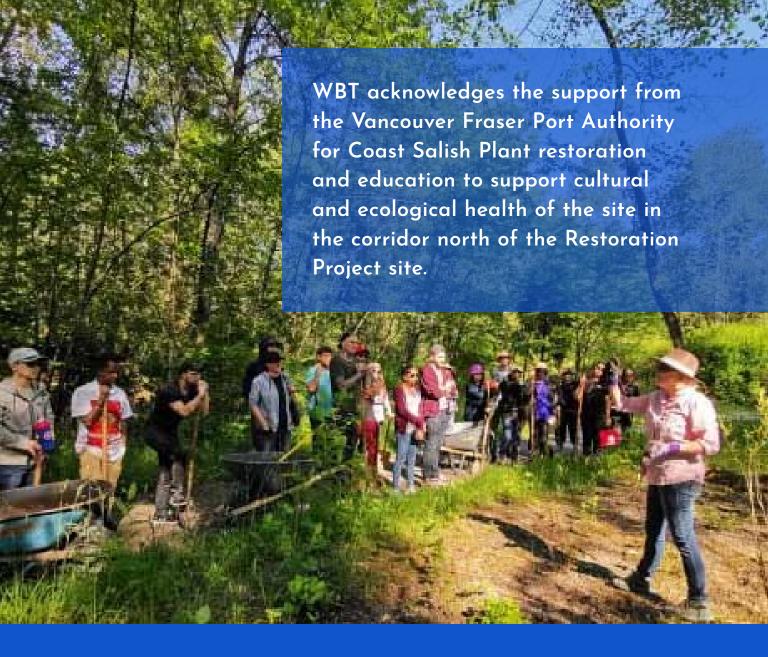
As we operate the Conservation Area at Maplewood Flats we are routinely coming into conflict with dog owners who feel free to have their unleashed dogs on the trails and even on the beaches and mudflats, entirely oblivious of the context of this semi-wild place. As the Wild Bird Trust Board of Directors discusses a plan to educate dog owners, or consider closing off some trails to dogs, we are committed to doing the research.

Here is some related news from outside of BC as researchers in Spain have recently published a study on the bird nest disturbances caused by off-leash dogs.

Conducted on the seashores of England, the study followed Kentish Plovers during their nesting season. It found that birds were disturbed 80% of the time by off-leash dogs compared to 12.9% of the time when only humans were near. This number jumped to 93.8% when both humans and dogs left marked boardwalks and paths to stroll into undisturbed areas. Conservationists want to encourage people to always keep their dogs on leashes or to keep

them off beaches all together during the nesting months of March-June. The reasoning behind this is that if birds are scared off too frequently, they are more likely to abandon their nests, thus leaving their eggs to become vulnerable to predators and harsh weather conditions. Shoreline birds already have dwindling numbers and many are on endangered species lists. Conservationists and the researchers believe these simple actions may help increase future bird counts.

Source: https://www.theguardian. com/environment/2020/nov/14/ study-adds-to-calls-to-ban-dogsfrom-beaches-during-nesting-season-birds



MAPLEWOOD MARINE RESTORATION PROJECT

NOVEMBER 2020 UPDATE

Over the past year, visitors have been able to observe progress on repairing industrial damage to a specific area of the mudflats and eelgrass habitat, led by the Vancouver Fraser Port Authority. In 2019, the Port offered to support complementary activities by the Wild Bird Trust that could enhance visitor experience at Maplewood Flats.

COAST SALISH PLANT RESTORATION

From fall 2019 to spring 2020, the community participated in the removal of invasive plants and planting of native



plants, and engaged in associated series of educational workshops, with Squamish, Tsleil-Waututh and settler speakers regarding wildlife and plant knowledge to highlight cultural and ecological information for public benefit.

CONSTRUCTION PHASE COMPLETE

- 230,000 cubic metres of sand placed to restore and raise the Maplewood basin floor.
- 13,000 tonnes of rock placed to create a rock reef.

These materials will support a variety of shellfish and crab and allow marine plants like eelgrass and various kelp species to establish, intended to increase the diversity of fish and wildlife in the basin.

EELGRASS TRANSPLANTING PILOT PROJECT

Based on consultation with Indigenous groups, two proposed eelgrass donor sites will be selected for harvest. A small work crew will access the sites from the shore for a few weeks of this transplanting work. Consistent with past work, the team will ensure there are no impacts to upland vegetation or trails. Approximately 5 percent of the to tal eelgrass bed for this project will be transplanted in the Maplewood basin from November 2 to 10 (weekdays). People looking out to the basin from the shoreline will see a small boat and dive crew in the area.

Online updates here: http:// www.portvancouver.com/projects/ habitat-restoration/maplewood/

Wild Bird Trust of BC

Annual General Meeting

NOTICE of VIRTUAL ANNUAL **GENERAL MEETING**

HOW TO REGISTER

Please confirm your attendance by reserving a ticket on Eventbrite:

bit.ly/wbtAGM2020

You will receive a Zoom Meeting invite once you sign up. Members do not need a computer to attend. They may attend by telephone through the Zoom link provided.

Saturday,

Dec 12, 2020, 11am - 1pm

Due to Covid-19 restrictions, the WBT will be holding a VIRTUAL AGM with Guest Speakers, Saturday, December 12, 2020, 11am to 1pm. The AGM runs from 11am to noon, followed by our guest speakers, from 12-1pm.

All members are encouraged to attend. Please confirm your attendance via this Eventbrite link bit.ly/wbtAGM2020 to receive a Zoom Meeting invite. Members do not need a computer to attend. They may attend by telephone through the Zoom link provided.

Guest Speakers on Co-managing Conservation

Building on last year's AGM and Symposium, this year we're going digital to present a panel discussion on co-management and



integrating Traditional Ecological Knowledge in conservation. Guests include Dennis Thomas (Tsleil-Waututh Nation) and Chantelle Spicer (Simon Fraser University). Dennis advances Tsleil-Waututh economic and cultural objectives, and has led Takaya Tours for many years. Chantelle's work with the Snuneymuxw First Nation explores co-management of Saysutshun Island (Newcastle Island), a BC provincial park. They share a passion for Indigenous knowledge, conservation and ecological tourism. The conversa-

tion will be moderated by WBT President Irwin Oostindie.

Chantelle Spicer (above) (Simon Fraser University), and Dennis Thomas (right) (Tsleil-Waututh Nation)



Wild Bird Trust of BC

Highlights of 2020

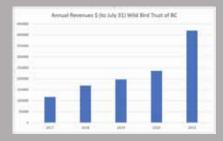
The AGM includes a report on the year's major achievements, program successes, organisational financial position, and human resources. Notably, the previous three years of stable Board governance has helped the Wild Bird Trust of BC flourish and advance our mandate. We now have an active membership base, and invite you to serve on a working committee: Programs, Habitat,

primarily from activation of the completed Corrigan Nature House, expanded education programs, and more site restoration. These changes were made possible by building a participatory organisation, securing donations from our membership, and attracting public investment.

The AGM also includes appointment of the next year's Board of Directors. As with recent years, your Thomas, Maureen Thomas.

Be it further resolved that the Appointment of Officer positions take place by the Directors immediately following the AGM, at the first Board meeting of the Directors and that the Directors may also appoint up to four more Directors during the Board term at their discretion.

At last year's AGM, the membership passed a motion to adopt



Our membership base, our staff team, public education work, and revenues have all dramatically increased since 2017.

Fundraising and Communications. Contact Marisa, volunteer@wildbirdtrust.org, for the next orientation session on becoming active.

Wingspan is thriving and advocating for the protection of wild birds in BC, and our online presence is engaging with thousands of bird lovers of all ages and backgrounds. Our membership base, our staff team, public education work, and revenues have all dramatically increased since 2017. Our staff team has grown from (approx) 1 full-time equivalency position (FTE) to the current 5.5 FTEs, and our revenues have increased from \$117,108 in 2017 to \$420,000 for this year ending July 31, 2021. This change is Board has developed a slate of proposed directors to reflect a range of priority skills and diverse ages and backgrounds, and is recommending this slate for approval. The Board encourages members seeking to be more involved to participate in our Board committees, which is the desired recruitment step before becoming a Board member.

Proposed AGM Motion: Be it resolved that the following members in good standing be appointed to serve as Board of Directors for the following year: (in alphabetical order) Kevin Bell, Taylor Boisjoli, Thomas Flower, Jude Grass, Paul Hundal, D'Arcy Hutton, Irwin Oostindie, Gloria Pavez, John Preissl, Carleen Traditional Ecological Knowledge (TEK) to integrate Tsleil-Waututh knowledge into our public education, programs, and habitat management practices at Maplewood Flats. Members also wanted a report back at the next AGM, so look forward to that update on Dec. 12 at 11am. So much has changed with Covid-19. However, with the support of many active members, we successfully pivoted from in-person walks in nature, to our virtual education talks.

We invite you to follow these easy steps to register for our exciting AGM program on Dec 12 at bit.ly/wbtAGM2020.

Wild Bird Trust of BC

The Faces of Wild Bird Trust



T'uy'tanat Cease Wyss is an ethnobotanist and consultant on our social enterprise plant nursery.



Maureen Thomas is former elected Tsleil-Waututh Nation Chief and incoming Board member.



Carleen Thomas is a former elected Tsleil-Waututh Councillor, educator, and Board member.



Nicole Preissl is an explorative designer and the Digital Communications Coordinator.



John Preissl is a photographer, eagle admirer and Board member.



Lianne Payne has served decades in non-profit and public sector leadership roles and is the Executive Director.



Gloria Pavez is an environmentalist and Board Treasurer.



Irwin Oostindie is a conservationist and Board President.



Braela Kwan is a journalist and the Staff Writer.



Erin Kendall is an expert in ecological restoration and the Nursery Growth Project Manager.



D'Arcy Hutton is a landscape architect and incoming Board member.



Paul Hundal is an environmentalist and Board Secretary.



Jude Grass is a retired educator and naturalist and Board Vice-President.



Thomas Flower is a university instructor, researcher, and Board member.



Honey Mae Caffin is a regenerative agriculturist and the Communications Director.



Taylor Boisjoli is a landscape designer and Board member.



Marisa Bischoff is an ecologist and the Assistant Restoration & Site Manager.



Kevin Bell is a naturalist, lifetime WBT member, and Board member.



Iggy George In Memoriam

Ernest Ignatius George - Slaholt passed away November 11, 2020. He was a Hereditary Chief of Tsleil-Waututh Nation.

Maplewood Flats is indebted to "Iggy" for his gifts of knowledge about these inlet currents, canoe stories, duck tales, and local knowledge. He frequently shared his Tsleil-Waututh stories with us, since 2017, about the land and water of this place—long before the Crown declared Maplewood Flats a wildlife sanctuary.

The Board of Directors of the Wild Birds Trust of BC will do right by these gifts of stories and honour his memory by working for the repair and return of these lands and waters to Tsleil-Waututh. We wish that the alienation which the Wild Bird Trust of BC unwittingly caused by creating an exclusive wildlife sanctuary does not continue for future generations. Our caretaking of this place represents a mere fraction of 1% of Coast Salish Peoples' continued stewardship. The reality is that these precious mudflats for Tsleil-Waututh is "where the tide went out, and the dinner was set" and were destroyed for short-term industrialization. The Wild Bird Trust of BC's work here should best

be described as humble repair, restoration, and redress for the land settlers destroyed a few decades ago when Iggy was a boy playing on these Flats.

We are grateful to Iggy for his kindness and gifts of his time, frequently attending our events in recent years and putting aside these difficult truths and sharing his message of kindness, local knowledge, as well as showing everyone his love of his family and his Tsleil-Waututh People.

MEMBERSHIP FORM

JOIN THE WILD BIRD TRUST — PROTECT MAPLEWOOD FLATS!

Dedicated to wild birds and their habitats on the principle all wildlife must benefit.	To sign up and pay online, visit our website, www.wildbirdtrust.org/membership
SINGLE □ \$30 /YEAR □ \$50 /2 YEARS	FULL NAME
FAMILY ☐ \$40 /YEAR ☐ \$75 /2 YEARS	STREET ADDRESS
NUMBER IN FAMILY:	
STUDENT/LOW INCOME ☐ \$15 /YEAR	
LIFE MEMBERSHIP ☐ \$500	CITY, PROVINCE
DONATION \$	POSTAL CODE
TOTAL \$	PHONE#
Please make cheques payable to Wild Bird Trust of British Columbia, 2649 Dollarton Highway, North	VISA CARD#
Vancouver, BC V7H 1B1	NAME ON CARD
A charitable tax receipt will be issued for membership fees and donations (up to 15% of all donations may be designated for WBT administration).	CVV (OR CALL IT IN)
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Call for 2021 Public Program Proposals

ports our mandate: To provide wild birds with sanctuary through ecological protection and restoration, and to support communities with education, culture, and reconciliation programs.

We are open to a range of proposals: walks, talks, workshops, research sharing, artistic pursuits or educational displays that help connect us to the lands and waters of the Tsleil-Waututh & Coast Salish at Maplewood Flats. For example, we are seeking regular bird identification workshops for all levels, ages, languages and interests. We encourage themes of ornithology, land reSubmissions for the 2021 calendar year are now being accepted until Dec 14, 2020. Each year we deliver 60-80 educational sessions throughout the year—almost all are free to participate!

pair, restoration, Coast Salish plants, heritage, climate justice, citizen science, reconciliation and redress. Collaboration is encouraged. We value the intersectionality of social issues with environmental issues, as humans are a part of nature too!

Due to the pandemic, we encourage proposals that can be adapted for safe social distancing or online. With large numbers of people accessing our free online COVID19 programming, we believe expanding and connecting with scientists, artists, youth and Elders is the right thing to do.

What we can provide:

- Space in the Nature House
- Production support (audio, lighting, projector)
- Facilitator and artist fees (typically range from \$0-\$150 per activity). We strive to pay artists per CARFAC minimum fee schedule.
- Open to revenue sharing models common in community and recreation centres.

Submit by Dec 14th: BIT.LY/MAPLEWOOD2021

ONLINE PROGRAMMING AT MAPLEWOOD FLATS

BT MARISA BISCHOFF

Marisa Bischoff is the Assistant Restoration and Site Manager at WBT

Through the generous support of WBT membership and friends, the WBT team has organized and hosted approximately 27 online Zoom events since May, many of which were recorded and are available to view at your leisure on our website, www.wildbirdtrust.org, or on the Maplewood Flats YouTube channel.

A major focus for the online presentation series was to provide our community members with updates on the ongoing research projects at Maplewood Flats. For example, on August 27th, Kirsten Bradford, Chloe Hartley (Habitat Committee Chair) and Irwin Oostindie (Board President) discussed the background, formation, and recent progress of the Habitat and Cultural Use Plan. On September 23rd, Harrison Smith, a Capilano University student, shared his wetland research conducted at Maplewood Flats this past summer. More recently on September 30th, Capilano University Professor and Board member Thomas Flower shared insights into the science, history, and methods of the monthly bird counts at Maplewood Flats.

The series also hosts specialists that share knowledge as it relates to the Maplewood Flats community, often at the intersection between conservation, art, and culture. On August 2nd, ethnobotanist Senaqwila Wyss hosted an all-ages virtual plant scavenger hunt where she walked viewers through the basics of plant identification. Notably, the Santoor & Poetry from Iran and Tsleil-Waututh event was particularly successful with currently over 2,000 views on Facebook. We hope to host similar cross-cultural events in the future that can be enjoyed by a wide variety of people.

We extend our sincerest gratitude to all of our community and WBT members for "tuning-in" and continuing to engage with us over the past six months during these difficult times.

UPCOMING ONLINE EVENT **SCHEDULE**

Starting in the new year the WBT will be expanding its online event schedule by holding two regular weekly events. Events throughout the month will cycle between topics such as Conservation & Redress, Habitat & Research, Youth/Kids, and Volunteer/Skills workshops. Additionally, we will be scheduling a monthly Elder conversation series as well as a monthly book club social evening. Many events will be familiar to much of our membership, albeit through a computer screen, while some events will introduce some fresh ideas.

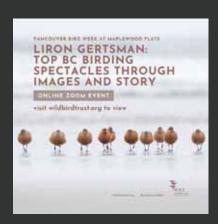
Events will be held virtually over Zoom for the foreseeable future in order to keep everyone safe; however, that may change given any developments with the COVID-19 situation.

We look forward to sharing new presentations, workshops, webinars, and virtual walks with you every Thursday at 7 PM and every Saturday at 11 AM starting January 1st. If you are interested in contributing your knowledge and/or skills through an online presentation with us, we invite you to share your ideas with us by responding to our Call for Proposals (see page 45).



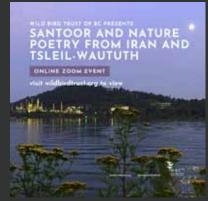




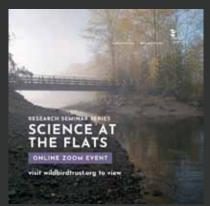










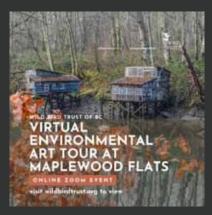












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www.wildbirdtrust.org



Coast Salish Birds Calendar

