

FREE
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THE FOOTPRINT PRESS



Passages from
Silverdale, Mission,
and beyond.



Message from the Editorial Committee

Modern science and ancient Indigenous knowledge reveal that forests, trees and plants provide numerous essential services and health benefits.

The forest community contains thousands of plant species, many of which have medicinal values for human beings and other animals. The practice of “Forest bathing”, used to promote health and well-being, is becoming more mainstream due to mounting evidence that spending time in forests lowers blood pressure, heart rate, levels of stress hormones, and promotes a more calm and relaxed mental state.

Trees release oxygen, absorb carbon, and improve air and water quality. Children living near urban parks are less likely to be diagnosed with ADHD, while people living away from green spaces, near large urban thoroughfares, are more likely to develop dementias, suggesting trees may play a role in brain development and health.

Forests mitigate extreme weather events and prevent floods and landslides, while the urban tree canopy provides shade and cooling to our homes and cities.

Forests, especially old growth ecosystems, function as sanctuaries for rare plants and animals such as the endangered Spotted owl, which depends on the unique habitat provided by old growth forests to survive. Other creatures, such as black bears and eagles, rely heavily on old growth trees for hibernation and nesting sites. At this time of biodiversity crisis, old growth ecosystems are islands of hope for many creatures facing extinction.

Clearly the value of trees is not just their timber. Forests deserve better protection. Logging and development processes which pit the lives and livelihoods of Indigenous and non-Indigenous residents against big economic interests are using the wrong test of the public interest. Consequently, they have degraded the land and the health of people who live there. Healing our relationships with each other, and with other life forms on this planet, including trees, plants and forests, is a necessary step on the path to reconciliation, and ultimately our own survival.

*Dryad painting by Ellen Sereda, Mission
<https://ellensereda.com/>*

Cover photo: Pacific Wren, Bruce Klassen, Silverdale

The Creation and Continued Nurturing of the Great Blue Heron Nature Reserve: The Process of Rewilding After Habitat Destruction

There are very few, if any, places in the world now that haven't suffered negative impacts from human development and activities, and the Great Blue Heron Nature Reserve (GBHNR) in Chilliwack, British Columbia, is certainly no exception. The 320+ acres of land that the reserve now encompasses has gone through several incarnations in the last century, and will continue to change with impacts from climate change and ongoing restoration and conservation efforts.

Before the draining of Sumas Lake in the early 1920's, the land in question was untouched floodplain wetland which provided habitat for a diverse array of animals and birds, including many species that are no longer present in the area, such as elk, grizzly bears, and Sooty grouse. The draining of the lake, and the ensuing habitat loss, was devastating to the biodiversity of the whole valley where the reserve is located, and devastating to the Stó:lō people whose livelihoods were dependent on the lake and its associated resources. Although the land that the GBHNR encompasses remained undyked, many of the wetland species that would normally

inhabit this type of ecosystem began to disappear with the disappearance of the lake.

In 1942, the Canadian Forces Base Chilliwack established a Wet Bridging Training site on the land that is now the reserve. The lagoons that are in the centre of the reserve were dug as bridge building training ponds in the late 40's-early 50's. Around this time, the heron colony, that is still such a dominant feature of the reserve, was beginning to be established, making it one of the longest lasting colonies in the lower mainland.

In 1996, the C.F.B Chilliwack Base closed and interest in the site coalesced with Chilliwack City Council, The Rotary Clubs of Chilliwack, and many local environmental groups. Chilliwack City put out feelers to Federal and Provincial ministries and it was agreed that preserving this precious wetland habitat was key to whatever steps might come next.

One of the biggest priorities outside of replanting the areas that had been stripped by the Department of National Defense (DND) over the years, was restoring degraded fish habitat. The Salwein Creek offers significant spawning habitat for lower Chilliwack-Vedder River Chum and





Coho populations. During the occupation of the land by the DND, the lower reaches of the creek were dammed and impounded. Restoration started in 2001 with a Salwein Creek Outlet upgrade to restore and improve salmon access to the upper reaches of the creek. Salmon habitat restoration continued in 2003 with the creation and enhancement of salmon spawning channels in the north eastern portion of the reserve. Much of this work was a result of collaboration between the City of Chilliwack, the Chilliwack/Vedder Watershed Restoration Society, and the Department of Fisheries and Oceans. This restoration work has been a great success as the Salwein Creek continues to provide healthy spawning habitat for Pink, Chum, and Coho salmon.

Many organizations, community members, and granting agencies have helped to support the rewilding of the heron reserve since it's conception 20+ years ago. Work like this takes ongoing shared efforts from the community. Work parties provide a framework for planting efforts, invasive species removal, and monitoring an abundance of plant and animal species that call the reserve home, many of which are listed as species-at-risk as identified by either Federal or Provincial status levels. These species include, but are not limited to: Red Listed Oregon Forestsnail (*Allogona townsendiana*), and Salish Sucker (*Catostomus catastomus*). Blue Listed Pacific Great Blue Heron (*Ardea herodias fannini*), Northern Red Legged Frog (*Rana aurora*), Autumn Meadowhawk (*Sympetrum vicinum*) and Western Painted Turtle (*Chrysemys picta bellii*). The Reserve is also home to three identified ecosystems-at-risk including: Red-listed Sitka spruce (*Picea sitchensis*)/salmonberry (*Rubus spectabilis*). Blue-listed Black cottonwood (*Populus balsamifera*)/Red-osier dogwood (*Cornus stolonifera*) and Black cottonwood (*Populus balsamifera*)/Sitka willow (*Salix sitchensis*).

Besides providing valuable habitat for plants and wildlife, wetlands perform several essential ecological functions, including water purification, shoreline stabilization, groundwater recharge, stream flow maintenance, and flood protection. The land the heron reserve encompasses is now the only undyked floodplain wetland associated with the Vedder River in the Fraser Valley and performs all of these functions, including mitigating the impacts of flooding by slowing runoff and absorbing excess rainwater.

The focus now is to balance protection of the undyked wetland ecosystem of the reserve with environmental education and enjoyment by the public. The hope is that the story of the Great Blue Heron Nature Reserve will continue on a path that continuously supports not just the rewilding of this piece of land, but the rewilding of other areas by helping to foster stewardship-oriented relationships between community members and their natural surroundings.

Camille Coray, Executive Director,
Great Blue Heron Nature Reserve

It's time to let our best defence against climate change protect us

Thousand year-old trees towering into the mist overhead with lush, electric green undergrowth intersected by crystal clear salmon-bearing streams, the old-growth rainforests in British Columbia capture the awe of people around the world, and it's no mystery why. These ecosystems are among the most iconic landscapes on the planet, beloved by all who set eyes on them, and valued in a thousand different ways.

Intact old-growth forests harbour rich biodiversity and provide homes for some of the most charismatic endangered species in the world. Every tree in B.C. grows in the territory of an Indigenous people, and old-growth forests are interwoven into the cultures and laws of these communities. The intrinsic feeling of peace that comes from sitting in forests that have been there for millennia, propels people to put their bodies on the line in defence of them. And of course, it's the sheer worth of the timber that these forests hold that makes them so valuable to the logging industry.

But more and more, we're beginning to see another critical role that old-growth forests play, that of a key ally

in the fight against the greatest challenge of our time: climate change.

The scientific consensus is growing stronger worldwide that intact landscapes with healthy native ecosystems have the highest resilience to flooding, drought, heatwaves, severe storms and other impacts of a changing climate.

Old-growth forests naturally regulate water flow and temperature, are more resilient to storms and, in some parts of B.C., to fires. We know extreme weather events will become worse in the decades ahead, so we must look to ancient forests as protection against climate impacts.

Additionally, old forests can store much more carbon than younger forests. When an old-growth stand is cut down, the majority of the carbon stored in it is either released as CO₂ or methane, or offset in the harvesting and transportation process. The rest is stored temporarily in final wood products. After it is clearcut, a patch of forest continues to emit more greenhouse gasses than it absorbs for more than a decade, roughly the same timeframe we have to dramatically reduce emissions if we want to avoid the worst case climate change scenarios.





Despite the vast extent of forests in B.C., and the degree to which the forest industry promotes itself as ‘climate friendly,’ for nearly twenty years, forests here now emit more CO₂ than they absorb.

You read that right: because of the way they’ve been managed, forests in B.C. are net sources of climate pollution.

So while healthy, intact old-growth forests do a better job at buffering the impacts of climate change that are already here, and limiting future climate change by holding huge amounts of carbon, B.C. is continuing to replace them with replanted forests that do a poorer job of both.

In the battle against climate change, we are effectively laying down our strongest shield and one of our sharpest swords.

B.C.’s NDP government has made some big commitments around protecting old-growth forests, but so far has failed to meaningfully stand up to the province’s powerful logging corporations and change the broken status quo in the woods. Despite promising to begin a ‘paradigm shift,’ the government remains entrenched in incremental tweaks and the same talk-and-log approach that’s plagued B.C. for decades.

But the public isn’t buying it anymore!

From ringing phones and flooded inboxes in the offices of MLAs across the province, to rallies and marches from Prince George to Nelson to Port Alberni, to the blockades around Fairy Creek that saw more than a thousand people arrested in 2021, the battle to save the last old-growth stands is at a fever pitch.


There are a thousand reasons for the B.C. government to legislate the end of old-growth logging and build policy and investment in a sustainable second-growth forest industry. The threat of climate change is one that will only become increasingly clear. Allowing forests to reach their potential as a climate solution is well within the power of the provincial government, and building a rural economy around protecting and restoring forests could be the most powerful way we fight climate change here.

Torrance Coste, National Campaign Director
Wilderness Committee

Echo lake old growth forest photos
courtesy **TJ Watt**, www.tjwatt.com

**Mission's ill-fated
Tree Protection Bylaw**





A tree protection bylaw is a common tool used by local governments to mitigate harmful impacts of clearcutting practices on private properties. Clearcutting can result in serious and costly consequences such as eroding land slopes, drainage issues, and flooding. The tree protection bylaw limits the cutting of designated protected trees and requires replanting of trees when necessary. Many communities including Abbotsford, Maple Ridge, Langley, Coquitlam, Port Coquitlam, Burnaby, Port Moody, Richmond, Vancouver, and Whistler, have acknowledged the reality of these risks and have taken this preventative measure of enacting a tree protection bylaw.

A key feature of a tree protection bylaw is the stand-alone prohibition on cutting certain trees without a permit. The prohibition operates regardless of whether a development permit has been submitted for approval. If development permit processes are relied on for tree protection, then the protection is not triggered until a development permit application has been submitted. The delay in triggering tree protection results in clearcutting occurring before a regulatory body can intervene, and this is a reality for Mission, as was confirmed in Mission's Engineering & Public Works Staff Report dated September 28, 2020 (1).

Although there has been widespread support of tree protection bylaws elsewhere, Mission has struggled to receive public support.

In 2020 Mission attempted to enact a tree protection bylaw which set out a regulatory framework that required landowners to obtain a permit prior to cutting or damaging a protected tree on their land (2). The permit requirements were aimed at regulating clearcutting for development, but the bylaw would have applied to all landowners. Achieving public support would require non-developing landowners to accept the fact that they will occasionally require a permit for tree cutting activities.

To achieve the objective of the bylaw but minimize the incidental impacts on non-developing landowners, the drafted tree protection bylaw included permit exemptions for tree cutting activities most common to non-developing landowners. For example, landowners did not require permits for cutting and pruning of trees growing within two metres of an existing building footprint, and in situations where emergency cutting is necessary (3). Emergency cutting was for situations when a tree posed an imminent danger of falling and causing injury to a person or property (4). There were light reporting requirements for emergency cuttings which entailed taking a photo and describing the circumstances.

The drafted Tree Protection Bylaw also attempted to shield non-developing land-

owners from reporting requirements. The reporting requirements most relevant to non-developing landowners applied in situations where a permit was required and there were at least two protected trees being cut on land smaller than 0.1 hectare (5). Reporting requirements increased as the proposed intensity of cutting increased. When it came to permit fees, the drafted bylaw allowed landowners to cut one protected tree per 0.1 hectare (about ¼ acre) per year at no cost and any additional trees would cost \$50.00 each.

The drafting of a tree protection bylaw requires seeking a balance between preventing harmful clearcutting and ensuring that any resulting burdens are not disproportionately distributed amongst Mission landowners. The drafters of the bylaw achieved this balancing act by consistently attempting to prevent non-developing landowners from coming within reach of the regulation.

Unfortunately, the drafted tree protection bylaw did not receive the support of the city councillors and Mission remains one of the few municipalities unprotected from clearcutting on private land. Hopefully Mission will welcome a Tree Protection Bylaw in the near future, but it may have to wait until development begins encroaching into the neighbourhoods of landowners who oppose the bylaw.

Kristy Montan, former Mission resident and 2023 JD Candidate, University of Alberta
Barred owl, White-Tailed deer and Black bear photos courtesy **Mike Stefiuk**

Citations:

1 District of Mission Manager of Environmental Services, *Engineering & Public Works Staff Report*, 08 September 2020

<https://pub-mission.escrimetings.com/filestream.ashx?DocumentId=762> accessed 17 March 2022.

2 District of Mission, By-law No 5970-2020, *Tree Management Bylaw 2020* (third reading 16 November 2020), s 4.

3 *Ibid*, s 5.1(e) and (k).

4 *Ibid*, s 3.1.

5 *Ibid*, s 7.1(b).



The values of the forest and the value of the trees

For the conventional economy, a forest is worth more when cut down and converted into products than when left standing. An inspiring array of activists in Fairy Creek on Vancouver Island put their bodies on the line in 2021 to protect old growth forests. In those trees they don't see 2x4s and copier paper, but life itself. The protests are a revolt against the hubris of a Western culture that sees nature as ours to conquer, to occupy, to enslave, and to destroy. This is also true of mining, oil and gas, and hydro dams.

BC remains bound by its colonial history and abundance of natural resources, so much so that we fail to see the intricate web of life of which humans are merely a part, and not the most important one at that. Perhaps 2022 will mark a turning point in how we manage our forests. In conjunction with a slow acknowledgement of Indigenous rights and title, a holistic approach to conserving and managing forests has never been more important.

How do we value forests anyway? A 2021 study for the Ancient Forest Alliance found more economic value in preserving those remaining stands. This is because they looked at a wider range of economic benefits beyond the value of timber harvested including traditional Indigenous uses, tourism and recreation, non-timber forest products, habitat for other species, and carbon storage. The study concluded:

Protecting all old-growth forests in the study area would contribute an additional \$40 million in net economic benefits over the next 100 years compared to business as usual, more than making up for the economic losses from forgone timber harvest. Forest carbon emissions would be reduced by 569,250 tonnes of carbon and tourism and recreation alone would contribute almost \$11 million in net benefits to society.

<https://ancientforestalliance.org/media-release-old-growth-economic-study/>

By the summer of 2021, Fairy Creek was upstaged by the forests burning in BC's Interior, one of the worst wildfire seasons ever. Total hectares burned in 2018 and 2017 were even worse, but on the historical record these three years stand tall over all other years. Prior to 2000, wildfires simply did not happen at this scale.

This fiery "new normal" has the fingerprints of climate change, added to the historical effort to convert forests into monolithic tree plantations, which are susceptible to mountain pine beetle infestation, itself an outcome of warmer winters that fail to control this insect's population.



Coast Salish Weaving Lifestyle

Burning forests convert living forests into carbon dioxide in the atmosphere. The emissions from the 2021 wildfires were about twice that of the carbon emissions from powering our homes, vehicles and industries. Excessive logging also contributes to making BC's forests a source of carbon to the atmosphere.

Our remaining old growth forests represent vast stores of carbon and they must be protected. The Ancient Forest Alliance study of BC's forests found that protecting stands with trees older than 140 years would help shift the balance back to them being a carbon sink.

That said, we must beware of crafty accounting deceptions pretending that conserving forests and ecosystems can be traded off for reduced obligations which dramatically and quickly reduce our use of fossil fuels for energy. Such carbon offsets are largely a deception. To meet our Paris obligations, we need to stop burning fossil fuels as quickly as possible AND we need to engage in forest conservation to suck up that excess atmospheric carbon.

The accounting game gets worse. In BC there are plans to cut Northern Boreal forest to produce pellets for export, supposedly as a "carbon neutral" fuel source because those trees will eventually grow back.

<https://www.policynote.ca/wood-pellets/>

Shipping waste wood halfway around the earth for this purpose makes little sense, but cutting trees while pretending to support climate action is insane!

Rethinking our relationship to our forests is central for the province to have a healthy carbon balance and sustainable future. It's also central to our mental health and physical well-being. We need to shift from viewing forests valued only through the lens of usefulness to humans, toward forests for their intrinsic value as ecosystems, habitat and life itself.

Marc Lee, Senior Economist in the BC Office of the Canadian Centre for Policy Alternatives



My name is Yvette John (White-Plume-Woman) P’eq sq’oyes Slha’li’. I carry my traditional name White-Plume-Woman meaning “close to the heart”. I am Stólō meaning “People of the (Fraser) River.”

In my late teens, I was taught by my Mother Ida John Wik-Tna éseq-Nakoo, to spin wool, dye with natural dyes, and weave, following the revival of Salish Weaving by Great Aunts Adeline Lorenzetto & Mary Peters in the Stólō Nation. These women brought Coast Salish weaving back to the people following their residential school experience. The special Coast Salish loom was made for me by my brother Arnold John (Swayel Spath). Thousands of years ago, fur from Woolly dogs and goats was gathered for the weaving. Today I use sheep wool which I spin and dye myself with natural dyes. Traditional Medicine plants are used as dyes. These plants include Golden Rod and Oregon grape for yellow, Elderberry for purple to pink, and Cedar which I gather and mix with natural iron from the ground to help the dye stay in the wool. I use soft rain water to create the dyes. Every time I make them using the same process the dye will be different.

I weave both traditional and my own designs.

Flying Geese is a vital traditional design. The migration of the geese symbolizes revival of the Salish Weaving principle of plenty.

The Sun Star means a new awakening, Diamonds mean love and the Triangle means protection. The Butterfly also means a new awakening.

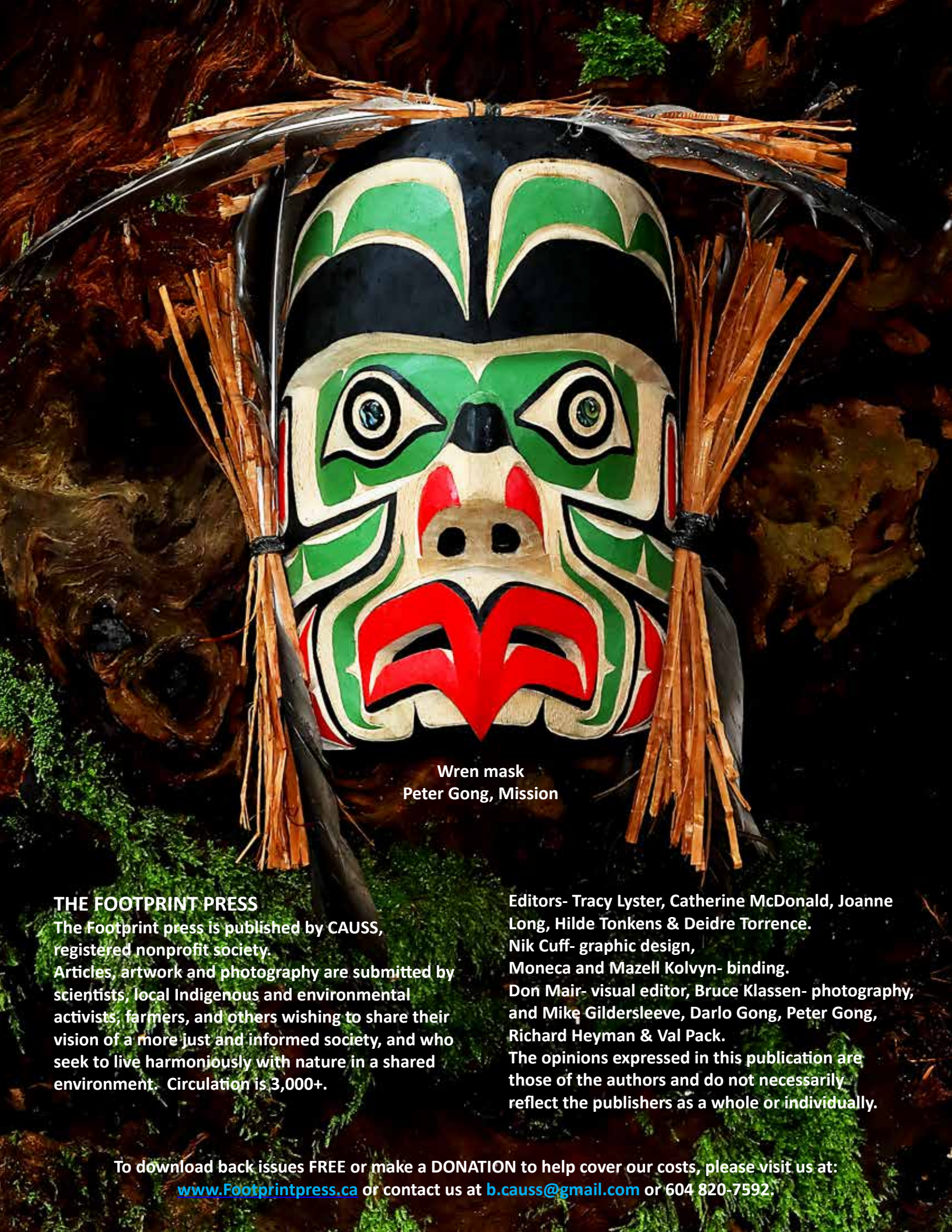
The Spawning Salmon and Bear designs are my own. I donated the salmon bear weaving to the Wild Salmon Defenders Alliance, to help protect the salmon, the bear and the water ecosystem.

Everything that is out there is us.

Yvette John (P’eq sq’oyes Slha’li’),
Stólō/Chawathil First Nation

Photo of Yvette John weaving courtesy **Kayla Sullivan** - Kayla Lee Artistry, Hope BC
<https://www.kaylaleeartistry.com>





Wren mask
Peter Gong, Mission

THE FOOTPRINT PRESS

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