

FREE  
MAGAZINE

Issue 13, 2014



*Tread Lightly and Listen to the Land*

# THE FOOTPRINT PRESS

Passages from  
Silverdale, Mission,  
Abbotsford  
and beyond.



## *Message from the Editorial Committee*

Ancient people revered the life sustaining forces of nature. They worshiped the seasons and the elements, knowing that their lives were dependent on nature's rhythms and services. We have since learned much about the complexity and power of natural systems. Yet somehow, somewhere, we lost our way, replacing reverence with efforts to control, subdue and exploit the earth. But enslavement of natural creatures and systems, too often leads to destruction of the environment we all need to survive.

A growing awareness of the true value of natural systems is leading many to forge a new path and leave the old destructive ways behind. Greed and ignorance are being replaced with compassion and understanding. Join the Footprint Press, on a walk of healing, in which people, and nature, flourish together.





# *The Healing Walk, June 2014*



**T**his year was the fifth Annual Healing Walk held near Fort McMurray, ground zero of Alberta's tar sands. Over the past five years, people from all over the world have gathered with First Nations people to walk, pray, and heal in the traditional territories most devastated by Alberta tar sands projects. Hosts for this event were the people of the Athabasca Tribal Council, Athabasca Chipewyan First Nation, Fort McKay First Nation, Chipewyan Prairie First Nation, Fort McMurray First Nation, Mikisew Cree First Nation and the Metis Nation. Jessie Cardinal a member of the Keepers of the Athabasca was a key organizer.

The Healing Walk was first initiated by First Nations of the area, in an effort to build connections with all those communities directly affected by the tar sands. The Healing Walk was not a protest or a rally, but rather a peaceful gathering focused on healing the environment and the lives of the people.

It was difficult to hear stories about the effects of the oil spills that have occurred in these areas, (including one in Cold Lake which continues to leak). We heard stories of people no longer being able to eat food off the land, or the fish out of the rivers and lakes. People were unable to trust the water for drinking, having to rely on bottled water, despite there being so much water around them. We also heard stories of increasing health concerns, based on the research by Dr. John O'Connor, who first noticed the high rates of cancer among the Athabasca Chipewyan First Nation.

These stories, along with a strong feeling of solidarity with those mostly First Nation communities, are what motivated my wife and I to travel to Fort McMurray to participate in the Healing Walk, and to see for ourselves the impacts of tar sands extraction experienced by indigenous people. The other broader motivation was the growing concern about global warming, rising greenhouse gas emissions, and the necessity to seriously reduce our dependency on fossil fuels.



Crane Lake Park, about 20 kms north of Fort McMurray, was the beginning of the Healing Walk led by the Elders. Drumming groups kept up a steady beat for the entire length of the walk, energizing us with what felt like the heartbeat of a nation. The day was one of blazing sunshine and oppressively warm temperatures. There were approximately five hundred participants of all ages, who had literally come from all over the planet.

Before long we were into what was termed the “syncrude loop”, an active part of what’s considered the largest industrial project on earth, and where production of the dirtiest, most toxic syncrude available takes place. Walking through this barren, ruined landscape was heart wrenching. This whole area was previously rich in biodiversity and the traditional hunting, fishing and gathering grounds for First Nations communities. To see this massive wasteland now with absolutely no signs of anything living, was much worse than we could have imagined, especially with the realization that just twenty years ago this was a healthy boreal forest ecosystem. The tailing ponds were immense and bleak with the smell of oil in the air and frequent bursts of cannon fire, to deter thousands of migrating birds from descending into the very toxic and deadly sludge. That there was anyone walking, let alone drumming, dancing and singing in this desolate landscape, seemed surreal. The steady stream of massive tanker trucks and industrial vehicles, whose drivers, wondering perhaps as well, what it all meant, made it seem even more strange. The only banner that was part of the procession simply read “Stop the Destruction. Start the Healing”.

It was inspiring to see and hear the determination of the First Nations people as they walked sang and drummed their way along the fourteen km route with sacred ceremonies held along the walk. Special offerings were made in the four directions as Elders enacted age old ceremonies to commemorate “Mother Earth”, expressing their deep connection and appreciation for the land, water and air. I had a growing feeling of solidarity with my fellow “walkers” and all those mobilizing around the world to demand their right to a healthy environment and livable communities. More and more citizens and communities are demanding concrete action and leadership from their governments, to address the grim realities of climate change.

Over this weekend, we realized and appreciated the importance of slowing down. We had the opportunity to bear witness and learn from the voices of Elders and First Nation leaders. We learned about the power of building community and the extraordinary resilience of the indigenous peoples and their determination to work together, healing themselves and the land. We believe that issues of indigenous rights, human rights, social justice, renewed democracy and climate justice are all central to this struggle and need our collective attention and resolve. If there was ever to be an all hands on deck moment, this is surely it.

It is not surprising, although entirely unacceptable in my view, that neither oil and gas corporations nor government leaders acknowledge the obvious and very real ecological and health impacts from these destructive developments. Instead what we hear is a constant ramping up of the economic development and continuing expansion of the tar sands and the urgency to get this oil to Asian markets. It’s almost as if it’s seen as some kind of acceptable collateral damage that the lives of First Nations, and their way of life, have been changed forever.

**Mike Gildersleeve, Mission**





# Moving towards biodynamic farming in Silverdale, B.C.

*“Nothing ever exists entirely alone; everything is in relation to everything else.”*  
The Buddha

Hello, my name is Angus Macdonell, born and raised in our fair city of Mission. I’ve held a variety of jobs in my life, most of minor significance; however what I’m embarking on now is more than just a job or career, it’s a shift in lifestyle. This marks my initial year of small-scale organic and biodynamic vegetable farming in Silverdale.

In 2012, I apprenticed for a year on two farms, one in Duncan on Vancouver Island, and another in Chilliwack. Last year I spent a couple weeks in northern B.C., on an off-the-grid organic farm in McBride, one of the many beautiful little towns that dot this province.

My desire to farm comes from a deep longing to see our current food system change, more specifically, to get to a point where we, as a province, can feed ourselves, in a manner that conserves and builds topsoil, while preserving the health of our environment for present and future generations. The core of a good model for local agriculture must include farming practices that respect the soil. Without the soil, we cannot grow food.

Considering we will not be able to rely forever on imported food from around the continent and globe, we need to start establishing models that can replace outdated food systems. Unfortunately, the dominant model of farming involves the use of millions of tons of fungicides, pesticides, and herbicides every year. These chemicals not only destroy the vast diversity of life in the soil, they also leech into our water tables, contaminating our water supply, ruin wildlife habitat, kill beneficial insects, and create health problems for us- “...everything is in relation to everything else.”

We believe it doesn’t have to stay this way, and this is why my girlfriend, Johanna, and I have started our farm. By supporting us and those around the province, country, continent and globe, who are making the same push for environmentally sustainable farming, you encourage a change for the better in the health of our environment, and consequently yourself, family and community.

We use biodynamic and organic principles to guide us in our farming methods. Biodynamic agriculture is sort of like organic plus. In addition to using compost, rotating crops and other core organic methods, it accounts for all the variables that affect the life of a plant, and an animal, when raising it for meat. There are inherent rhythms in nature, which we perceive at times when our eyes are looking in the right place, but most of the time go unnoticed. Biodynamic agriculture provides a blueprint that allows the farmer to work with these rhythms to enhance the quality of the vegetables grown, or meat raised.

In biodynamic agriculture the aim is to create a farm organism that is completely self-sufficient. Thus, all the fertilizing needs come from the farm, seed is saved for the following year, and no outside inputs are brought to the farm. It is a lofty goal we hope to achieve.

Land prices usually prohibit young farmers from getting started. We are blessed to know Kailee, Corey, Margaret and Auggie who generously let us use their land for free, and our landlords Rob and Anne who created a space for us to farm on their property, and who continue to lend us their tools and time when needed. Furthermore, we wouldn’t be doing this if it weren’t for the continued support and generosity of my amazing parents Don and Ann.

We sell at the Mission City Farmers’ Market and through a vegetable box program that supplies individuals with a weekly box of freshly harvested seasonal vegetables. This year the program ran for 19 weeks, while next year hopefully longer. For more information about us and the veggie box program, you can visit our website

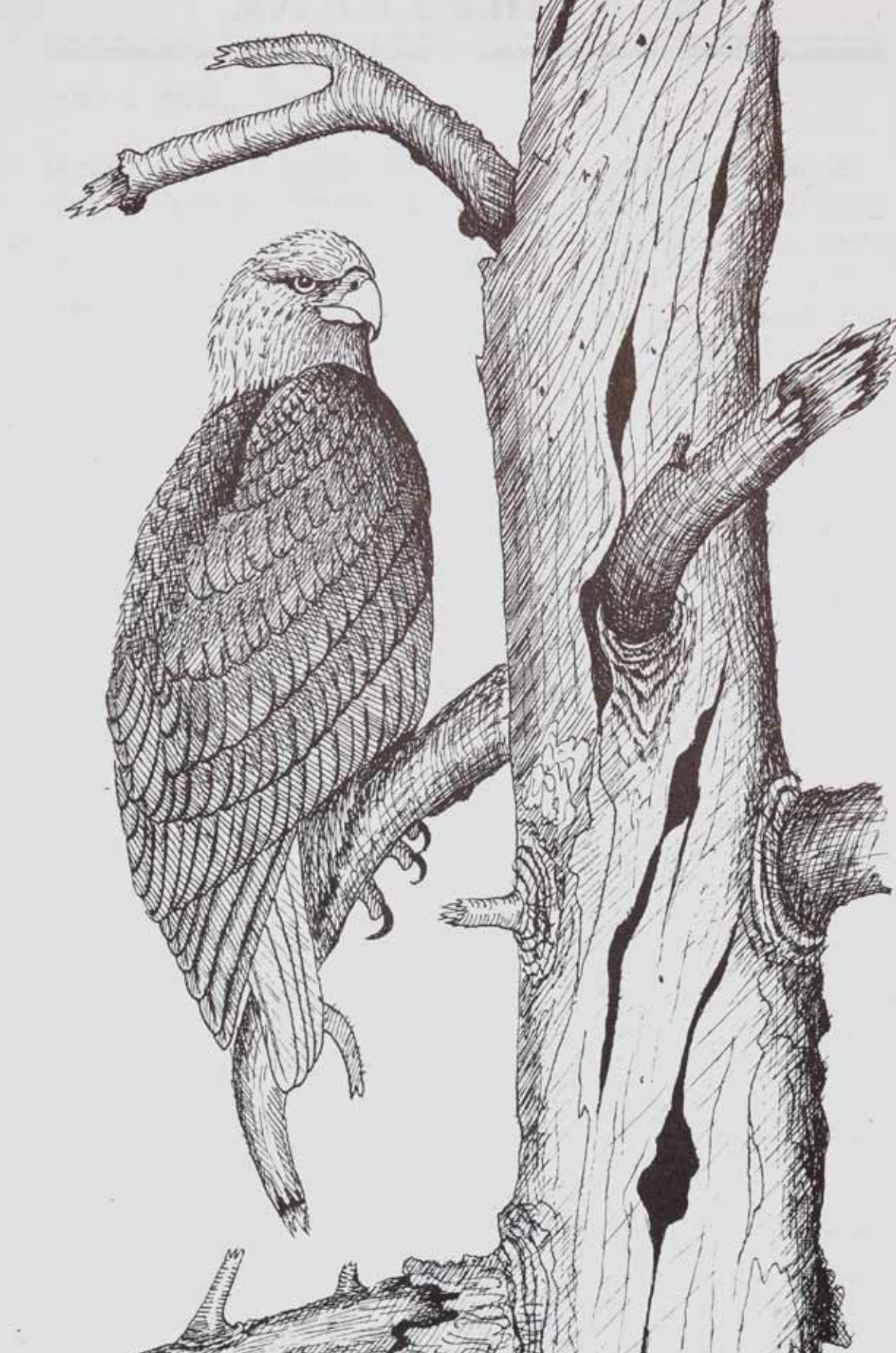
[www.dandelionfarms.ca](http://www.dandelionfarms.ca)

or see us at the Farmers’ Market!

**Angus Macdonell, Silverdale**







## Rare and Endangered Birds of Silverdale

Glen Ryder (1938-2013)

Glen Ryder's meticulous line drawings, watercolour paintings, and accompanying field notes, earned him the title of "the finest field naturalist in B.C." All of his

work was inspired to help us understand, and ultimately conserve, our local wildlife. His legacy also includes building and erecting nesting boxes for cavity-nesting

owls, especially the threatened Western Screech owl, in woodlands throughout the lower mainland. Many thanks to the Ryder Legacy, R. Wayne Campbell, and

the Langley Field Naturalists for granting us permission to reprint this selection of Glen's line drawings, from the Birds of Langley publication.



Beloved of the Salish Sea, Helen Gamble



## Saving Wild Salmon from destructive Industrial practices: A convergence of efforts to preserve British Columbia's ecosystem.

### Why are Wild salmon a critical issue?

**W**ild salmon are essential to the maintenance of biodiversity as they feed multiple species from the headwaters to the ocean. Wild salmon are an integral part of the social, cultural, physical and spiritual well-being of indigenous people. Wild salmon make the forest grow – pulling carbon out of the atmosphere, providing humans with oxygen. Wild salmon, in essence, are a global climate stabilizer. Preserving wild salmon is an international responsibility, as wild salmon know no borders. This is of particular concern to British Columbia, Washington and Alaska.

***To protect our precious Wild salmon, the following are two important steps that can be taken:***

### Revoke Open-net Fish farm leases and promote Sustainable Land-Based Aquaculture

The federal government is currently enabling and promoting an aggressive 41% expansion of fish farms along the migration routes of Fraser sockeye salmon. This is in defiance of the Cohen Commission recommendations related specifically to fish farms, and there are no plans to restrict farm locations in relationship to inward/outward migration of wild salmon. Government critics say Ottawa has still not adequately responded to Cohen's recommendations, and if it did, its response is shrouded in secrecy. Atlantic salmon feedlots are breeding grounds for sea lice. Those feedlots are like incubating wards of

viruses with European strains, most likely imported to Canada in Atlantic salmon eggs from Norway. These pathogens flow out of those open-net cages and can spread to Fraser river sockeye smolts that swim past open net pens in the narrow straights between Vancouver Island and the mainland. Tons of growing Atlantic salmon, trapped in open-net pens, release their untreated feces degrading the marine environment. As the Harper government moves closer to the 2015 election, it is changing laws to prop up the fish farm industry at the expense of wild salmon and its habitat. The government is now considering removing Section 36 of the Fisheries Act, in order to allow fish farms to release "substances harmful to fish", because the salmon farmers say they need more drugs to fight sea lice. The federal fisheries ministry's (DFO) mandate no longer includes protection of wild

salmon (See link next page to Dr. Alexandra Morton's posting: DFO's Mandate Is Not What You Think).

These actions of the Harper government pose a real threat to Aboriginal and non-aboriginal fisheries, raising "a duty to consult" with River First Nations. In response to this, we need to mobilize First Nations all along the river to pressure the federal government to stop its assault on Fraser River wild salmon and its habitat. Measures to accomplish this include implementing the Cohen Commission recommendations, supporting the First Nations Wild Salmon Alliance, endorsing the Net-Pen Farmed Salmon Boycott, and supporting a regulated closed containment, land-based Atlantic salmon aquaculture, away from Fraser River wild salmon migration routes. You too can support the call for a full, international investigation into Canada's failure to protect wild salmon from industrial fish farms.

What Lives in the Heart of an Eagle, Helen Gamble





## Stop Imperial Metals operation

On August 4, 2014, Imperial Metals Mount Polley Mine Corporation unleashed billions of gallons of toxic wastewater from their massive tailings storage facility into Polly Lake. The toxic wastewater rushed out, ripping a 300-foot wide scar in the forest where Hazeltine Creek used to be. The contaminated wastewater further spilled into Quesnel Lake, which connects to Quesnel River and the Fraser River watershed. Imperial Metals was issued five warnings about the tailings storage facility which reportedly was spilling over in May, 2014. Imperial Metals failed at mining, and the province of B.C. failed in its oversight of their operations. Yet, with provincial and federal government approval, Imperial Metals is already operating, or planning to operate, more mines with the same tailings dam design as Mount Polley Mine in the Tahltan, Ahousaht, Tla-o-qui-aht, and Southern Secwepemc territories. One is already in operation in the Wet'suwet'en territory.

*"The loss of the salmon, for us as Secwepemc is a matter of life and death for our culture. Can our salmon survive this devastation?"* Jean William

**Imperial Metals cannot be trusted to regulate itself.** We must put a moratorium on mining until legislative reforms and regulations are in place that will prevent another mining disaster. Imperial Metals must stop leaking their toxic tailings into the Quesnel watershed, and clean up the mess they caused to the Quesnel river, a river that hosts the world's second largest Wild salmon run. Imperial Mines must restore the ecosystem they severely degraded, and pay penalties for the disruption they caused to the municipalities and First Nations communities in the impacted area.

## Guiding Values and Principles we must follow to save Wild salmon

We need a radical evolution founded on values of respect for natural laws, cooperation with nature, a spiritual connection that honors our interconnectedness, and sharing both the benefits of what our environment bestows upon us, and our responsibility to give back by protecting, and preserving, clean water, air and land. We must, if we are to survive, balance this giving and taking. Don't take from nature more than you need. Consume less, buy local. We must not use the atmosphere as a free waste dump. We can't ravage the earth and expect there to be no consequences. Centralized power in the hands of corporations must be decentralized through regulations that protect both the environment, and the life within it, including human beings. Ecosystems know how to self-regulate, corporations don't. There are limits to earth's ability to absorb pollution. There are boundary limits we cross at our own peril. We need a reciprocal relationship with nature. It is we humans who are weak, fragile, and vulnerable and the earth is hearty and powerful. Condense intent into actions that foster peace and prosperity for all. Avoid greed, materialism and aggression like a poisoned well. Hold the moral high ground and graciously serve your ideals to benefit the greater good of all.

**Eddie Gardner,**  
**Net-Pen Farmed Salmon Boycott Coordinator**  
<http://www.farmed-salmon-boycott.com/>

## Rediscovering Our Water Connection



Clean water, fresh air, clear skies, and the earth's ability to naturally control floods are some of the values or key indicators scientist and ecologists use to quantify health of an ecosystem. These ecosystem services also provide humans with important cultural, spiritual and physiological (health) benefits that elevate our mental, social and physical well-being.<sup>1</sup> Despite increasingly relevant insights on the links between healthy watersheds and healthy humans, people continue to degrade watersheds at an alarming rate. It is not simply aesthetics that draw people like me to the lower mainland. It is what it represents – health, vitality and stability.

What many new and long-term residents don't know, is the constant struggle to maintain these spaces that provide so much. Everyday more land is being developed, taken out of the Agricultural Land Reserve, or rezoned for extractive industries that in turn pollute our water and air-sheds and promote unhealthy lifestyles.

### Pricing Nature

At the core of this discussion is the concept of pricing nature as a way to quantify its value. This is a gargantuan task considering the subject to be priced – all the components of a watershed! It is a way to explain the power and implications of not respecting an intact ecosystem. We are building a case for the protection of nature so as to ensure the continued availability of clean water, fresh air, and other important requirements for life. The ecosystem needs to be healthy in order to filter, soak, flow and feed. If it were destroyed, the cost to provide clean drinking water or safe fish to eat would become incredibly high- some estimates over \$30 billion per year.<sup>2</sup> An ecosystem collapse would impact us in many unknown ways. For a hint, we need only to look at tar sands extraction and the impacts on downstream first nation communities to understand the direct correlation between a broken watershed and a broken people.<sup>3</sup>

Salmon, Tessa Fawdry



[http://alexandramorton.typepad.com/alexandra\\_morton/2014/04/ottawa-what-they-do-not-what-they-say.html](http://alexandramorton.typepad.com/alexandra_morton/2014/04/ottawa-what-they-do-not-what-they-say.html)



Water quality and quantity is a serious consideration in both urban and rural settings. A tangible outcome of assessing value of ecosystem services is measuring the quantity and quality of fresh water that flows through streams and rivers before they meet the ocean. Indicator species like salmon are a good example of why it is important to maintain water quality and quantity. Destruction of upstream and lowland habitats without appropriate regulations will have direct impacts on both quality and quantity which can cause increased wash outs, sedimentation and turbidity, in turn effecting oxygen levels. All these details and more need to be taken into account when assessing the value of development or extraction, in light of the services provided by local waterways.

Every day thousands of people cross into Canada looking for a new beginning, a home. The increased population pressure in the Fraser River watershed makes this the time to act, to teach, and to create an understanding of ecosystem services and valuing natural wealth. Watershed Watch is mainstreaming these ideas of valuing ecosystems through the concepts of nature therapy and preventative medicine. The connection is clear. Humans need intact healthy ecosystems as much as all other life on Earth.

**Nature Therapy and Preventive Medicine**

Wallace Nichols describes in his book, “Blue Mind: The surprising science that shows how being near, in, on, or under water can make you happier, healthier, more connected, and better at what you do,” shows how proximity to water can diminish anxiety, amplify creativity, increase success, and improve our overall health and well-being. Our brains and well-being are literally hard-wired to water—and thus, to needed improvements in watershed protection and planning.

Perhaps even more exciting, is the recent medical research, largely from Japan, on “nature therapy and preventive medicine,” known as “shinkinroku,” or forest bathing. <sup>4</sup> Not bathing, as in the sense of getting wet, but as in taking in the sights, sounds, and perhaps most importantly, the smells of forests. These researchers provide a compelling argument that we shouldn’t forget that our physiological functions are still adapted to nature. They show through a set of physiological experiments that time spent in nature can produce measurable health benefits, including lower blood pressure, lower heart rates, improved immune systems, elevated levels of cancer killing proteins, and lower cancer rates. Given the importance of health

to well-being, the measurable health benefits linked to green space will hopefully prove to be powerful arguments to planners and politicians to protect and restore key ecosystem services and to minimize the nature-human disconnect too common in today’s society. Japanese planners are now making plans to add “forest therapy stations” in urbanized areas.

**Rights of Nature**

It is no longer an outrageous idea to attribute rights to water, rivers, or the ecosystem at large. Ecuador and New Zealand come to mind for granting “legal rights to rivers, forests and other natural entities”. <sup>5</sup> We must take a leadership role at the local level, watershed by watershed, for the sake of our own well-being and that of future generations. The recent disappointing disaster at Mt. Polley was a stark reminder of how dramatically an ecosystem can be degraded, effectively cutting access to potable water to the local community, and placing fear and suspicion on a local food source, the returning salmon and their offspring. The way our global economy is structured, disasters like Mt. Polley are viewed as both an externality and as profitable. It is this system that has led to the decimation of forests and a severe lack of ingenuity, an almost laissez-faire approach to the well-being of society. Watershed Watch aims to support and fulfill requirements for environmental security by mobilizing efforts at the local watershed level.

**Together We Can**

From the First Nations people as the original stewards of the land, to consecutive generations of settlers, we must continue to foster strong local watershed governance models. Re-education and remembering is necessary. Slowly but surely change is happening as we start to make the connections and organize ourselves for what matters. It is no accident that Vancouver (and by extension the lower mainland) frequently ranks high on livability surveys.<sup>6</sup> Our healthy watersheds play an important role in supporting healthy people and healthy economies. It is our responsibility to stop taking them for granted and begin to understand the true value of what is around us.

**Lina Azeez, Maple Ridge  
Watershed Watch Salmon Society**

*“What is within you is also around you”*

**Todd Inouye, yoga instructor  
BC River’s Day 2014**

**Fraser Voice**

Want to get involved? Want your watershed to be appreciated for its intrinsic value and want to see that be translated into broader policy and regulations around land-use and water protection? Be it through active participation in watershed-based regulation of the BC Water Sustainability Act or through localized issues, it all starts in your watershed! Contact me, Lina Azeez (lina@watershed-watch.org), to get the conversation flowing. Fraser Voice is a Watershed Watch project that aims to support local communities to raise their voices and be heard on issues pertaining to local waters. We are motivated to collaborate with diverse interest groups to protect our home waters of the lower Fraser, to foster political change and bring words like ‘nature therapy’, ‘valuing ecosystems’ and ‘local governance’ into the homes and psyches of everyone. It is a big goal but I know that working together, we can do it!

5. <http://newswatch.nationalgeographic.com/2012/09/04/a-river-in-new-zealand-gets-a-legal-voice/>

6. [http://en.wikipedia.org/wiki/World%27s\\_most\\_liveable\\_cities](http://en.wikipedia.org/wiki/World%27s_most_liveable_cities)

**Endnotes:**

1. Principles of Ecosystem Stewardship: Resilience-based Natural Resource Management in a Changing World. F.S. Chapin, G.P. Kofinas and C. Folke (eds). 2009. Springer Science and Business Media.
2. <http://davidsuzuki.org/publications/reports/2010/natural-capital-in-bcs-lower-mainland/>
3. <http://business.financialpost.com/2014/07/08/oil-sands-pollution-linked-to-higher-cancer-rates-in-fort-chipewyan-study-finds/>
4. Lee, J., Q. Li, L. Tyrväinen, Y. Tsunetsugu, B. Park, T. Kagawa and Y. Miyazaki. 2012. Nature therapy and preventive medicine. In Jay Maddock (eds.), Public Health – Social and Behavioral Health.





# Trees of Life

“Look up, way up!” Many of us may remember the friendly suggestion of the well-known children’s TV character. To look up while walking in treed areas, we may behold wondrous sights; small feathered heads, or furry faces peering down upon us, ensconced in their snug homes in lofty tree trunks. Above, and below the tree’s bark, invertebrates scuttle about, or hide within the indentations.



Such homes may be found in standing live, dead, or decayed “wildlife trees”. Others may have fallen, but standing or fallen, they still offer ideal habitat for wildlife, conservation and enhancement. Reportedly, wildlife trees help over 80 species of vertebrates and invertebrates, in various ways. Therefore, they are deemed important members of all innate forest

ecosystems. Wildlife trees, in their various cycles of life, from germination and maturation, through to decay, over many years or centuries, are created by many diverse factors. These living (biotic) factors include: animal or insect invasions, disease, and fungi. Non-living (abiotic) factors include: wind, snow, lightning, local climate, wind throw, and fires. Wildlife trees must be of a suitable height, diameter, decay state, and species. Specific vegetation must be in close proximity, they must be in a suitable geographic area, and within specific tree stand abundance.

Due to encroaching development, logging and adverse agricultural practices, wild areas are quickly diminishing, along with essential wildlife trees.

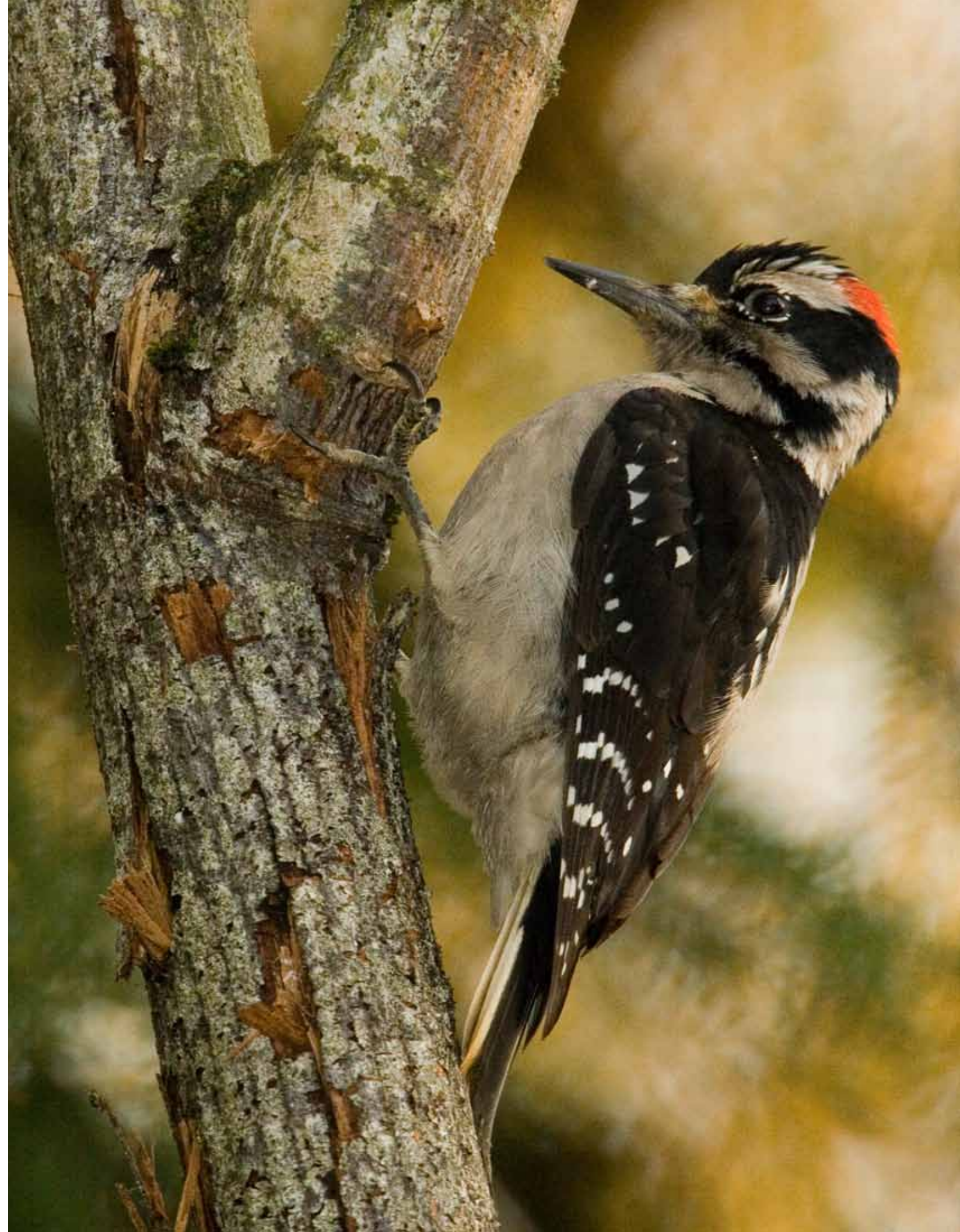
Considering the length of time required for a tree to complete its cycles of life, and the huge benefits bestowed on other life forms, including humans, much care must be given to tree conservation, including wildlife trees. Careful management of wild areas, including proper assessment, conservation, harvesting, appropriate plant-based buffer zones, and consideration of wildlife uses, are crucial to the retention of these vital wildlife trees.

Though some legislative protection is offered to wildlife trees, especially to nest trees, through a section of the B. C. Wildlife Act, information is available to municipal planners in their decisions involving local developments. However, private organizations, namely the Wildlife Tree Stewardship program (WTS), serve to protect these valuable trees by monitoring their continuing existence “through observations, documentations, and reporting.” Through other WTS valuable services, including

working with landowners, these trees, critical to many wildlife individuals, will hopefully continue on into perpetuity!

So, while searching out these crucial wildlife trees, follow the wise suggestion of the friendly giant to “look up, way up!”, but from a safe distance, please!

**Val Pack, Mission**





## THE FOOTPRINT PRESS

The Footprint press is published as a non-profit community newspaper. Articles and artwork are submitted by dedicated residents wishing to share their vision of a more just and informed society, and who seek to live harmoniously with nature, in a shared environment. Circulation is 2000+. The paper can also be viewed on-line at [FootprintPress.ca](http://FootprintPress.ca) or contact us at [b.causs@gmail.com](mailto:b.causs@gmail.com) or 604 820-7592. Your support is appreciated and your participation is welcome. The opinions expressed in this publication are those of the authors and do not necessarily reflect the publishers as a whole or individually.

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