

FINDING SOLUTIONS

Summer 2018 davidsuzuki.org

Healthier transportation gets a green light

Transportation is Canada's second-highest source of climate-altering emissions. Getting people out of cars is a top priority.

You're helping Canada move people in ways that reduce congestion and pollution.

Leading up to the election it won, the B.C. NDP adopted recommendations from our *Breaking Gridlock* report. Then all levels of government came together to enable the largest transit and active transportation investment in B.C. history — \$7.1 billion to expand Metro Vancouver's transit network.

Quebec aims to be a North American leader with its \$2.9-billion sustainable mobility policy. Its goals:

reducing solo driving trips by 20 per cent and increasing electric vehicles. Quebec City will spend \$3.3 billion on its first comprehensive public transit system. Montreal closed a road through Mount Royal Park, improving cycling and pedestrian safety. And it plans to grow its Blue Line, its first metro extension in 30 years.

Toronto approved a 25-year plan prioritizing walking, cycling and public transit in the downtown area. The Bloor bike lane became permanent last November. Now we're pushing for bike lanes on other main city roads. And we're working with University of Toronto MBA students to find common ground with local business owners on bike lanes.

"TARA STARTED THE FOUNDATION AND RAN IT FROM THE BEGINNING." ~DAVID SUZUKI

In the beginning, David Suzuki and Tara Cullis invited thinkers to preliminary meetings to brainstorm a new environmental organization, unlike any other. "We were going to be bigpicture oriented, to battle problems on a deeper level, at their sources," she said. "We'd gather people together and in the face of these big, difficult issues, keep each other going."

Everyone was on board and excited, with loads of ideas. But someone needed to get it going. Tara jumped in with both feet.

- "In my mind, I was already working full time on all these environmental issues," Tara said. "I thought we'd just be carrying on, but with more allies.
- "It was absolutely all-consuming. All the pressure to do things properly, legally, effectively — and sustainably — fell on my shoulders," she said. She learned by doing, working around the clock, sometimes staying at the office in the early days until 4:00 a.m.

The fledgling Foundation leveraged established relationships and victories the family had already won in the Amazon, in B.C.'s Stein Valley and on South Moresby Island, Haida Gwaii. The new organization started the first research station in the Lower Amazon, which is still there, with its original director, Barb Zimmerman. It helped stop a dam in the Amazon and helped create the largest area protected by an Indigenous group in the world. And it helped Ainu try to stop the Nibutani dam in Japan.

The Foundation incorporated in 1990 with Tara at the helm, working at a desk in a friend's office with a handful of passionate volunteers pitching in. "Everyone was a volunteer in the environment in the 80s," she said. Now she's proud of our 95 staff in Montreal, Toronto and Vancouver.

David didn't want to use his name for the new organization. But he was already well known and Tara agreed



We're named for David Suzuki. But his wife, Tara Cullis, has been our organizing force since we began.

when other early board members tried to convince him. "I knew he was an asset we could turn into fuel for the good fight," she said.

We owe our existence to Tara's brilliance, drive and unfailing tenacity.



Two-thirds of solitary bees nest in the ground, like this mining bee.

PROTECTING POLLINATORS

Bees everywhere are in trouble. To help them, we need to get to know them better, especially species living where we do.

With your help, we launched the BIMBY (Bees in My Backyard) Project in April.

We recruited 100 Toronto households willing to create wild bee sanctuaries in their gardens. Each purchased a BIMBY Citizen Science Kit educational materials, a custom-made nest tube, a magnifying glass and pollinator-friendly plants and seeds. Each participant committed to submit data every two weeks to University of Toronto researchers.

We taught these citizen scientists how to identify local wild bees — from tickle bees to bumblebees to metallic green sweat bees. Over the summer, they'll attend two more free workshops featuring expert speakers.

Our BIMBY pilot sold out! We may expand it to other communities. (Stay tuned.)

INDIGENOUS STEWARDSHIP HEALS PEOPLE AND THE LAND

Canada's massive boreal forest stretches across six provinces. It's the world's largest intact forest ecosystem, an important source of oxygen and a crucial carbon sink. Some people call it Earth's "northern lungs."

It's also the traditional territories of more than 600 First Nations, Inuit and Métis communities. They've stewarded their lands for millennia.

Now mining, logging and oil and gas activities are degrading some areas. People can no longer carry out traditional livelihoods — a violation of treaty rights. They're also usually excluded from decision-making affecting their lands.

Indigenous-led protection and conservation safeguards local economies, culture, language and knowledge transmission. It's also critical to maintaining and restoring Canada's biological diversity.

Creators of established protected areas in B.C. have much to teach.

With your support, we interviewed experts, community knowledge holders and Canadian Indigenous Circle of Experts advisers.

We learned Indigenous-led protected areas:

- Are as diverse as the traditions and territories of the people behind them
- Support sustainable livelihoods, self-determination, land use and cultural revitalization

- Are about people maintaining and healing their relationships with the land, themselves and each other
- Support healthy wildlife populations and show real conservation results

With your help, we'll continue supporting Indigenous-led conservation activities across Canada. Working together, we can help protect Earth's "northern lungs" for generations to come.



PROTECTING WILD SALMON AND THOSE THAT DEPEND ON THEM

Open net-pen salmon farms often operate on First Nations territories without the consent of the people they most affect. They spread disease, sea lice and pesticides into the ocean. Migrating juvenile wild Pacific salmon may get sick and die. The 75 remaining Salish Sea orcas are starving because of depleted chinook salmon stocks.

When Broughton Archipelago First Nations occupied two fish farms in protest, we quickly mobilized to support them. David Suzuki and more than 50 of B.C.'s bestknown chefs sent a letter to the provincial government. Our senior science and policy adviser John Werring sat on the Ministry of Agriculture's Advisory Council on Finfish Aquaculture and initiated a research project looking into possible movement of pathogens from open net-pen salmon farms to the surrounding environment.

In June, the B.C. government announced its new approach to managing ocean-based salmon farm tenures. It's good news for First Nations in the long term. But the province punted the responsibility to protect wild salmon to the federal government, even after a recent report found the feds were gravely mismanaging Canadian aquaculture.

SAVING ORCAS

Another adult Salish Sea orca has died and a recently born calf failed to thrive. Now only 75 remain.

We've organized a major mobilizing force to save them. #JoinThePod has grown to more than 18,000 people who care about orcas and are ready to take action to protect them.

Science supports immediate actions to protect chinook salmon — the Salish Sea orcas' favoured prey — as one of the most effective ways to protect the three southern resident pods.

With your support, we're pushing for:

- More chinook fisheries closures
- Regulations to limit shipping traffic sound disturbances
- Expanding protected refuge areas for feeding
- Fewer fish farms in salmon migration routes
- Limiting whale watching in Salish Sea orcas' feeding refuges



PHOTO: CENTER FOR WHALE RESEARCH

We invite everyone to #JoinThePod and promote solutions, not guilt or fear. We celebrate the community of support, and the optimism and hope it provides. Engage, join the pod and stand with the orcas.

MEET YOUR THREE NEW DAVID SUZUKI FELLOWS

With your help, annual Suzuki Fellowships support scholars who embody David's special strengths: science excellence and inspiring people to act. They study climate solutions and communications strategies, mentored by Foundation staff.



MAXIME FORTIN FAUBERT, CLIMATE CHANGE ADAPTATION AND SUSTAINABLE CITIES FELLOW

Maxime's Université de Montréal PhD research focuses on phytotechnology. He aims to improve climate resilience by using plants and fungi to decontaminate polluted soils. In his fellowship, he'll map vacant, contaminated Island of Montreal lands that contribute to the "heat island effect," but could be transformed into green spaces.



NICOLE DAVIES, INDIGENOUS KNOWLEDGE AND CLIMATE CHANGE FELLOW

Nicole is Anishinaabe and Métis. Her University of Victoria master's degree in Indigenous governance focused on land-based knowledge revitalization, ecological restoration, plant medicine and Indigenous queer ecologies. For the fellowship, she'll focus on Indigenous approaches to food sovereignty and ecological restoration and barriers communities face in revitalizing practices.



TARA MAHONEY, CLIMATE CHANGE COMMUNICATIONS FELLOW

For her Simon Fraser University PhD, Tara is specializing in new forms of participatory political culture in Canada. In her fellowship, she'll integrate qualitative research, mapping, crowdsourcing and digital storytelling to better understand how to leverage media and culture in a way that empowers renewable energy champions.

CANADA'S CLEAN ENERGY STORIES LIGHT THE WAY

Humans are the storytelling species. It's how we teach social norms and inspire people to act.

Throughout the country, people are looking for ways to share their clean energy stories. Now, thanks to you, they're inspiring others through Charged Up, our community-led renewable energy program.

Here are three good news stories to inspire you:

WINDS OF CHANGE IN LAC-MÉGANTIC

On July 6, 2013, a freight train carrying crude oil derailed and exploded, killing 47 people in this southern Quebec town. Now a few kilometres north, La Coop éolienne du Granit wind farm has emerged from the ashes as a symbol of hope. The surrounding 16 municipalities collect close to \$1 million a year selling clean energy to Hydro-Québec. It's the most profitable community co-owned wind farm project in Eastern Canada.

SECWEPEMC NATION GOES BIG BY GOING SMALL

Communities that control their power promote self-sufficiency while protecting the climate. Ten solar-powered tiny houses on unceded Secwepemc traditional territory are helping block the proposed Kinder Morgan Trans Mountain pipeline. They're asserting the nation's Indigenous rights and title, re-establishing village sites and providing homes for families facing a housing crisis.



PHOTO: ZACK EMBREE

VARENNES' VISIONARY NET-ZERO LIBRARY

Large municipal buildings cost hundreds of thousands of dollars to light, heat and cool. Varennes Public Library, which runs on sunshine and geothermal energy, costs nothing. It creates more energy than it uses. A consistent, controlled temperature protects the collection. And its stunning energy efficiency — 78 per cent better than conventional buildings — inspires citizens, neighbouring communities and visitors from around the world.

CANADA'S METHANE POLLUTION REGULATIONS A WORLD FIRST

"Cutting methane pollution is one of the cheapest, most effective ways to address climate change." IAN BRUCE, SCIENCE AND POLICY DIRECTOR

Canada has taken a major step in cleaning up its oil and gas sector. We're the first country to commit to methane emission regulations for the industry, an important shift toward climate protection.

Why is this important? Methane is a powerful greenhouse gas. Over a 20-year period, it's 84 times more potent than carbon dioxide as a climate pollutant. It's also responsible for 25 per cent of already observed disruptions to Earth's climate.

Thanks to you, we conducted groundbreaking research that uncovered the dirty truth: Government and industry underreport fugitive methane emissions.

According to the International Energy Agency, 75 per cent of oil and gas industry methane emissions could be easily reduced. About 50 per cent could be reduced at no net cost even for a profit — because industry can sell the captured gas.

Cleaning up leaking methane will create jobs and save the industry the very resource it wants to sell. But many in industry are reluctant to fulfil their climate responsibilities. So we need government intervention.

With your support, we'll push the federal government to hold provinces accountable for meeting the new regulations.

GROWING YOUNG FARMERS

Gardening is a great way to connect kids to food, communities and ecosystems. It's a hands-on science lesson — weather, photosynthesis, soil composition and decomposition!

Eight ways gardening benefits children*

1. HEALTHIER FOOD

Studies show that growing food increases kids' preference for fruits and vegetables. Gardening also helps prevent obesity and other health problems.

2. OUTDOOR EXERCISE

An hour of gardening burns 250 to 500 calories! Time outside provides sensory stimulation, fresh air and vitamin D.

3. LESS SCREEN TIME

Planting and harvesting provides a much-needed opportunity to connect kids with nature.

4. EMOTIONAL BOOST

Gardening alleviates and prevents depression and anxiety. It improves emotional reactions, mood and social behaviour.

5. TIME WITH FAMILY

Planting, harvesting and preparing food together helps families connect, team-build and cultivate a sense of purpose and achievement.



6. IMPROVED FOCUS AND MEMORY

Consistent gardening improves alertness, cognitive abilities and memory. According to an *American Journal of Public Health* study, being in outdoor green space helps reduce ADHD symptoms in children.

7. ANALYTICAL SKILLS

Planting a garden requires reasoning, initiation, planning and organization. Let kids choose plants and help calculate how many seeds and seedlings they'll need. Keep a journal to make observations and measure growth.

8. IMPROVED IMMUNITY

In *Let Them Eat Dirt*, microbiologists Marie-Claire Arrieta and Brett Finlay say early exposure to healthy microbes from farming and playing in soil kickstarts the immune system and helps prevent disease.

Grow your own young farmers!

- Frequent local farmers markets. Let kids choose produce they're interested in trying. Encourage them to ask farmers questions about crops and how to grow them.
- Visit a local organic farm. Many hold workshops, open houses and "you-pick" opportunities. Some also have animals to pet.



PHOTO: SOLARA GOLDWYNN

- 3. **Grow at home.** Good starter crops for children: lettuce/mesclun, radishes, carrots, potatoes, zucchini, strawberries, pumpkins and watermelons.
- 4. Cultivate community. Connect with neighbours and work together to plant your boulevard or roundabout. Look for workshops at schools, community centres and gardening associations. Try programs that let you help harvest other people's gardens.

*Adapted from a Rasmussen College article

TEN YEARS IN QUEBEC!

Established in English since 1990, we opened an office in Quebec in 2008 and started working in French. The reaction of Quebecers and francophones from all over the country has exceeded our expectations.

A decade later, we have more than 100,000 supporters in Quebec. From an initial team of three, we've grown to a group of 12 passionate staff. With your support, we've helped protect the St. Lawrence River and belugas, stop Energy East, fight against climate change — and more!

And recently, we launched *Demain, le Québec*, a book celebrating citizen-led green initiatives and the people building the world we want.

Finding Solutions

A publication of the David Suzuki Foundation, a registered Canadian charity working to protect the diversity of nature and our quality of life, now and for the future.

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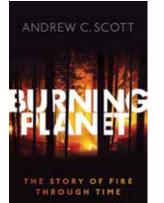
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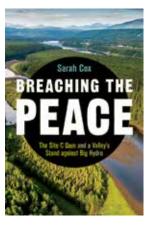
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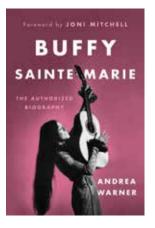
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Burning Planet: The Story of Fire Through Time

Andrew C. Scott / OXFORD UNIVERSITY PRESS

Under control, fire is essential to our lives. Out of control, it's terrifying. As global warming accelerates and humans encroach further into natural lands, wildfires are becoming more frequent and widespread. Andrew Scott examines the history of fires through plant materials preserved in charcoal fossils, which "can capture the finest details of flowers and other plant organs." It's a fascinating journey into the science of this force of nature that could help us learn to deal with increasing wildfires.

Breaching the Peace: The Site C Dam and a Valley's Stand against Big Hydro

Sarah Cox / UBC PRESS; ON POINT PRESS

Sarah Cox depicts families and communities fighting their governments to protect their homes and the lands that have provided for them over generations, the collision between government priorities and Indigenous rights, and the values clash around large-scale energy projects, food security and protecting precious ecosystems in a warming world. It's a compelling glimpse into the lives of those affected by Site C that provides insight into the increasing struggles many people are facing over land and water use.

Buffy Sainte-Marie: The Authorized Biography Andrea Warner / GREYSTONE BOOKS

Through more than 20 albums, decades of activism and teaching, and accolades including an Oscar (for co-writing "Up Where We Belong," sung by Jennifer Warnes and Joe Cocker in *An Officer and a Gentleman*), Cree artist Buffy Sainte-Marie has led a fascinating, influential life. Blacklisted by two U.S. presidents, Sainte-Marie continues to make powerful music and speak truth to power. This biography is a personal look at the struggles and successes of an extraordinary artist and her prominent role in the rich history of musical activism.

Metamorphosis

Nova Ami and Velcrow Ripper / CLIQUE PICTURES, TRANSPARENT FILM, NATIONAL FILM BOARD OF CANADA

The film *Metamorphosis* "takes the pulse of our Earth and bears witness to a moment of profound change: the loss of one world, and the birth of another." It opens with frightening images of destruction and expressions of anguish — cyclones, fires, drought, toxic industry. But, like an insect transforming from egg to caterpillar to chrysalis to butterfly, it gradually shifts to a new vision of positive action, imaginative solutions and inspiring possibilities.

PEOPLE POWER POSITIVE CHANGE

Over the past few months, heat records have broken worldwide.

Temperatures in southeastern Canada have hit record highs. In Montreal, people sweltered under temperatures of 36.6 C, the highest ever recorded there, as well as record-breaking extreme midnight heat and humidity, an unpleasant experience shared by people in Ottawa. Dozens of people have died from heat-related causes in Quebec alone.



In early July, the temperature in Ouargla, Algeria, reached 51.3 C, the highest ever recorded in Africa! The U.S., Europe, Eurasia and the Middle East have also reached all-time record temperatures.

Despite overwhelming evidence, many still cast doubt on climate science and scientists.

Politicians and governments fight against the very measures critical to addressing the crisis and ensuring the planet's climate remains stable enough for good human health and survival. Industrial interests and their supporters in media and politics have actively worked to downplay the problem and hamper progress.

We have federal and provincial governments expanding fossil fuel infrastructure and development to reap as much profit as possible from a dying industry. The fossil fuel industry continues to receive massive subsidies, including a multi-billion-dollar taxpayer bailout for an American pipeline company, while clean energy receives far less support.

But positive change is happening — at the local level. While national and provincial decision-makers dither, municipal governments and people-powered projects are taking the lead. The Foundation's grassroots Charged Up and Blue Dot campaigns are but two inspiring examples.

Elected officials come and go. Communities, families and the Earth endure.

OUR STORE IS NOW OPEN

For a limited time, find wildflower seeds and cards at store.davidsuzuki.org



