David finding Suzuki **Foundation** SOLUTIONS



The world is a better place with monarch butterflies, which are important pollinators.

ARTWORK: LAURA TIMMERMANS

Help us bring back the butterflies

You may know that monarch populations in Mexico plummeted to a record low of about 33.5 million this winter, compared to an annual average of 350 million over the past 15 years. A principal cause is the dramatic loss of the single species monarchs depend on: milkweed.

Monarchs travel thousands of kilometres each spring to spend their summers in southern Canada. To make the journey from Mexico and the southern U.S., monarchs need milkweed. Monarch mothers only lay their eggs on the underside of milkweed leaves, and the caterpillars dine on the plant. Although it was once common in fields, roadsides and farmland, almost 90 per cent has vanished from some areas because of agricultural practices and widespread herbicide use.

While the leaders of Mexico, Canada and the U.S. have promised to help the butterflies—in response to urging from a growing chorus of scientists, writers and conservationists—we are excited about the potential for concerned citizens across the country to pitch in.

The simplest way to help monarchs—and other butterflies and insects—is to add milkweed and nectar-producing native flowers to balconies, gardens, parks and green spaces in your community. It's a fun way to get kids interested in nature's wonders. And it will beautify and bring butterflies to your neighbourhood.

As part of our Homegrown National Park Project, this spring we're launching a Toronto-based campaign to crowd-source a milkweed corridor through the city. Milkweed plants will be available through our website (davidsuzuki.org/gotmilkweed) for residents to plant in their yards and balconies, or you can support our team of Homegrown Park Rangers, who will plant milkweed and other pollinator-friendly flowers and shrubs in parks and schoolyards.

You can also help researchers better understand the butterfly's breeding, migrating and overwintering cycles by becoming a citizen scientist. The U.S. Monarch Joint Venture website (monarchjointventure.org) offers numerous resources for citizens to track migration, count butterflies and monitor larval populations and disease for monarchs—and other butterflies.

Check our website for resources to help protect pollinators like bees and butterflies, including how to raise your own monarchs, create milkweed and butterfly gardens and even certify your yard as a monarch way station. Join us in bringing back the butterflies this summer.

Jode Roberts



Right to a Healthy Environment



Victory for wildlife



Green Living



Rockin' in the Free World

donor profile

For Glen Estill, the answer was blowing in the wind

"We are in a war with entrenched vested interests to shift the world to a sustainable energy path. We have no choice but to win, so win we will—with truth, technology and science." ~Glen Estill

An article about renewable energy in this very newsletter back in 1999 inspired Foundation donor Glen Estill to create his successful wind energy company, Sky Generation.

"I was on a camping trip to Newfoundland, where it was windy all the time," Estill said. "I'd just read a piece on wind energy in a Suzuki Foundation newsletter. I kept thinking there must be something you could do with the energy in the wind. Now what had been an abstract thought was blowing across my face. I began researching wind energy as soon as I returned home."

Estill launched Sky Generation in Lion's Head—just north of Owen Sound, Ontario—the next year. The company erected its first wind turbine on the Bruce Peninsula in 2002. When Estill sold the company in 2011, 13 turbines were generating enough energy to power 10,000 Canadian homes.

Past president of the Canadian Wind



Entrepreneur Glen Estill built a successful wind energy business with smarts and a tenacious will to combat climate change.

PHOTO: TAMI SCHWERIN

Energy Association (CanWEA), Estill also sat on the Ontario Wind Power Task Force and various committees, and continues to inform government policy and public debate on alternatives to fossil fuels, including in his popular wind-blog.com.

Estill's bold move to leave his family's business "to chase the wind" inspired his brother, Lyle, to start his own green business, Peidmont Biofuels, in Pittsboro, North Carolina. In *Small Stories, Big Changes*, the younger Estill remembers spending "endless nights at one another's kitchen tables arguing, discussing and strategizing on ways to combat climate change." And before getting into wind

energy himself, nephew David Estill ran a flourishing solar energy installation company in Guelph, Ontario.

While building his business, Estill endured vicious, misinformed and personal attacks by wind energy opponents who used fear to divide communities. But his determination to "do what needed to be done" drove him forward.

"We aren't hopeless in the fight against climate change, or for cleaning up the air," he says. "Solutions exist. We just need to deploy them."

Alternative energy pioneer Estill is helping make our research work for Canada—and we applaud him.

Monthly donors: Did you know that when you give by credit card, up to six per cent is lost to processing fees?



You can boost your impact without any extra cost by switching to direct debit monthly donations. We don't pay processing fees for gifts processed through bank accounts.

Switching is simple, just mark a cheque as void and send it back to us along with the enclosed form. We'll take care of the rest.

If you already give by direct debit, thank you for keeping our administrative costs low!

Living in a healthy environment should be a right

It's no secret that our identity as Canadians is rooted in the beautiful landscapes that surroundus. It's why Canadians have always felt such a close connection to nature.

But after generations of caring for our natural areas, we've been moving in the wrong direction over the past number of years. It doesn't need to be this way. That's why the David Suzuki Foundation is building a movement to see a healthy environmentbecome a fundamental Canadian right.

In November, we released three papers by environmental lawyer, professor and author David Boyd on the idea of a constitutional right to a healthy environment, along with a video. The response was incredible. Online, our environmental rights message reached more than 700,000 people. More than 10,000 members of the DSF community added their names to a list of Canadians who want to

finally guarantee their right to a healthy environment.

The right to clean water, air and food is clearly something Canadians from across the country care deeply about. But it's important to know we're not alone. Already, more than 100 countries recognize these rights as law, including Argentina, South Africa, Thailand and France. Closer to home, Pennsylvania residents are celebrating a state Supreme Court ruling that used environmental provisions in the state's constitution to strike down parts of a new pro-drilling act because it would threaten people's health.

In the coming months, we'll release the final two papers by David Boyd outlining more international examples and the potential legal pathways that can help move us forward. We'll also reach out to thousands of supporters to encourage



Environmental lawyer David Boyd has researched environmental rights worldwide.

them to take action to protect the people and places they love. Together we can help guarantee environmental rights for every Canadian.

Alvin Singh

Foundation ushers in Year of the Horse

Volunteers, elders, Richmond Earth Day Youth Summit Green Ambassadors, Surrey's Do What U Luv dance group and the Strathcona Business Improvement Association joined the David Suzuki Foundation to bring sustainable horsepower to Vancouver's Chinatown New Year Parade on February 2.

This is the second year the Foundation has taken part in Vancouver's Lunar New Year Parade. Last year, David Suzuki led the parade team. This year, our team was led by young staff, volunteers and our Richmond youth partners, who put creativity to good use by merging art with the sustainable power of bicycles. What's more, the parade organizing committee took our advice from last year and urged the 70 parading teams to offer only sustainable items to spectators. Team DSF handed out juicy mandarin oranges to 100,000 cheering onlookers. We've been invited to offer advice and information to the parade organizing

David
Suzuki
Foundation

Foundation staff, volunteers and friends joined festivities in Vancouver's Chinatown for the Chinese New Year Parade.

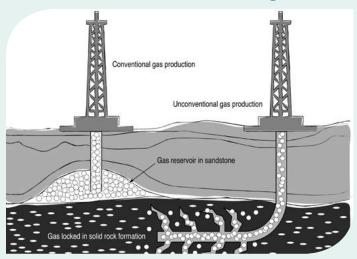
committee this summer as it plans details for next year's event. Banning plastic water bottles is at the top of the agenda.

As for our youth partners from Richmond, a city across the Fraser River from Vancouver, they're meeting April 26 for the Richmond Earth Day Youth Summit, known as REaDY. David Suzuki will field questions from youth and is also keynote speaker at the event, which features workshops and activities to promote environmental stewardship.

This is the third year our team has worked as full partner with the REaDY Summit and the first time they've partnered with the Musqueam First Nation, who will guide programs and mark the collaboration with a ceremonial opening. This year's theme will be a celebration of the Fraser River, how it nurtures the communities along its banks and—most importantly—how we can make the future better by recognizing our connection to the river and the environment.



Foundation to examine fracking



Hydraulic fracturing, or fracking, has greater impacts than conventional gas extraction.

Hydraulic fracturing, or fracking, is a controversial method of extracting gas or oil from rocks deep underground. In parts of Canada, it's being touted as an economic driver and a way to create jobs. But at what cost? As a science-based organization, the David Suzuki Foundation is set to examine the practice and its impacts on the environment. We're starting later this year with a comprehensive review of the existing science. That will inform a research project to fill the gaps in our knowledge about shale gas and tight oil production and export in Canada.

Citizen science fills gaps in Fukushima knowledge

Many questions remain, but little monitoring has been done of the spread of radiation to the Pacific West Coast following the meltdown at Japan's Fukushima nuclear power plant. To fill the gap, we've partnered with the Woods Hole Oceanographic Institution to support a citizen science project. We're helping citizens collect seawater samples from Haida Gwaii and Bamfield, which will be sent to WHOI for analysis, with results posted to the Institution's website. The research makes it possible to develop a baseline for radiation arriving from Japan.

Geocaching Ocean Keepers

Explore nature, discover new places and learn about the amazing underwater world of Canada's Pacific coastal waters with our new Ocean Keepers adventure. Our volunteers gathered information about marine creatures, from humpback whales to abalone, made each species a trackable tag and linked them electronically for geocachers worldwide to create a transcontinental ocean scavenger hunt. Learn about geocaching and this fun and educational outdoor adventure at www.davidsuzuki.org/geocaching.

Using the courts to protect species at risk

Recovery plans are overdue for more than 160 species at risk in Canada, but four fortunate ones are finally getting plans that were supposed to be in place years ago, thanks to a court challenge against the federal government we helped initiate.

In what the judge called "the tip of the iceberg", the court found an enormous systemic problem in the two ministries that protect endangered and threatened wildlife. The environment and fisheries ministers broke the law when they failed to enforce the Species at Risk Act.

While the legal win is good news for Pacific humpback whales, marbled murrelets, Nechako white sturgeon and Southern Mountain caribou, the fate of many other federally recognized endangered and threatened species remains in jeopardy.

The American badger, yellow-breasted chat, northern goshawk, spotted turtle and grey fox are just some of the species that are waiting, some as long as seven years, for their recovery plans. When plans come this late, the impacts on wildlife of large development projects, like the Northern Gateway pipeline, aren't considered.

Recovery strategies work by identifying threats, critical habitat and approaches to help species recover. The recovery strategy for the basking shark, for example, provided the rationale for the recent code of conduct for boaters, ecotourism operators and commercial and recreational fishers encountering them.

The Species at Risk Act was adopted in 2002 to protect Canadian plants and wildlife. Management plans are now required for 192 species.

Canada's government should follow its own laws and take seriously its commitment to protect our threatened wildlife. The 160-plus species overdue for recovery plans deserve protection without further delay, as well as resources to make their recovery a reality.

Theresa Beer



ARTWORK: TIN CAN FORES

The American badger is one of many species at risk in Canada waiting for recovery strategies.

Homegrown National Park springs into Toronto

for another year

This spring the Homegrown National Park project returns to Toronto for its second year.

The ambitious effort to crowd-source a green corridor fit for birds, bees and butterflies through Canada's largest city will be bigger this year—expanding to five city wards—and is sure to bring even more nature home to the city, one fun green intervention at a time.

We're partnering again with great local organizations, like Park People, Evergreen, Not Far From the Tree, LEAF and Jane's Walk. We've reached out to dozens of neighbourhood groups. A handful of last year's projects and events will continue, including efforts to bring canoe planters to city parks and the season-capping Homegrown Park Crawl. The second year will also feature an architectural design challenge, garden contest and an overnight camp-out in the city.



Homegrown National Park Rangers prepare to plant a canoe garden.

PHOTO: JODE ROBERTS

Most importantly, another crop of two-dozen Homegrown Park Rangers will report for duty in March. They'll be walked through a two-day community organizing boot camp, which will arm them with great ideas and community connections. Then they'll be let loose on their neighbourhoods.

The project aims to both bring nature home to the city and connect Torontonians to nature by tapping the creative energy of locals. Last year's amazing interventions—like pothole planters, moss graffiti and pollinator gardens—demonstrated that residents can be empowered to make awesome things happen in their neighbourhoods. And these small, fun actions help build toward the ultimate goal of a greener, healthier city.

To learn more about what's happening with the Homegrown project this year, check out davidsuzuki.org/homegrown.

Jode Roberts

Foundation celebrates winter in Quebec with outdoor hockey

Those who have spent time in Quebec during winter know why La Belle Province is renowned for being Canada's winter capital!

Despite Quebec's reputation for being a winter wonderland, its citizens have noticed a real change in the past few years: theirwinters are disappearing. Threatened by the impacts of climate change, winter seasons are becoming significantly warmer and shorter. Above and beyond these impacts on the region's weather patterns and snowy landscapes, climate change is also taking a toll on Quebec's culture, which is deeply rooted in winter. Think outdoor hockey, ice-skating, cross-country skiing and snowshoeing, all of which are threatened by steadily rising temperatures.

To raise awareness of the impacts of climate change on Quebec winters, the Foundation and Équiterre, along with its partners Mouvement Desjardins and Tim Hortons, presented the fourth edition of its annual outdoor hockey game "La Classique Protégeons nos hivers".

This year, two well-attended hockey games were played on outdoor rinks as part of the Carnaval de Québec and la Fête des Neiges festivities held in Quebec City and Montreal. The events consisted of a family-friendly showdown between local celebs including Les Cowboys Fringants and Maxim Martin, environmentalists, and retired NHL players from the Quebec Nordiques and the Montreal Canadiens, including Georges Laraques and André "Moose" Dupont. Our partner Tim Hortons was also on hand to offer free travel mugs and coupons for free hot chocolate to spectators and passersby, along with the Foundation's useful tips on how to reduce greenhouse gas emissions



PHOTO: MÉMOIRES PHOTO

The Foundation celebrated winter in Quebec with hockey stars and local celebrities.

by taking various actions in our daily lives.

For those who were only able to join us in spirit, the Foundation also launched "protegeonsnoshivers.com", a special microsite with a photo gallery of Quebec winters from the 1880s to today, with shareable facts on climate change and its impact on our favourite frosty season.

Manon Dubois



The buzz on bee-friendly yards and balconies



PHOTO: EVAN LEESON VIA FLICKR

Bees eat two things: nectar (loaded with sugar, it's their main source of energy) and pollen (for proteins and fats). Choose a variety of plants that flower at different times to make sure they always have a snack available. The general rule is that native plants attract native bees.

Bees also have good colour vision. It's one reason flowers are so showy! They especially like blue, purple, violet, white and yellow. Planting flowers of a single species in clumps just over a metre in diameter, instead of scattering them, ensures bees are more likely to find them.

Bee species have different tongue lengths, which means they're adapted to different flowers. A variety of flower shapes will benefit a diversity of bees.

These plants, organized by blooming time, are just a few native to Canada that attract bees:

Early: blueberry, cotoneaster, crabapple, cranberry, crocus, foxglove, heliotrope, hazelnut, heather, primrose, willow

Mid-season: blackberry, cat mint, catnip, chives, dahlia, hyssop, lavender, raspberry, sunflower, yarrow

Late: aster (perennial), beggar's tricks, borage, coneflower, cornflower, cosmos, goldenrod, pumpkin, sedum, squash

BUILD A BEE BATH

Bees and other beneficial insects—ladybugs, butterflies and predatory wasps—all need fresh water to drink, but most can't land in a conventional bird bath without crashing. You can help:

Line a shallow bowl or plate with rocks. Add water, but leave the rocks as dry islands to serve as landing pads. Place the bath on the ground in your garden. Put it near "problem plants"—those that get aphids, for example—and the beneficial insects that come to drink will look after them. Refresh the water daily, adding just enough to evaporate by day's end to avoid creating a mosquito breeding ground.

Lindsay Coulter

funding solutions

Rowing the Pacific to help protect oceans

"This is my ocean, the one I grew up with, the one I should be rowing." ~Rebecca Berger

Combining two passions—rowing and ocean health—Rebecca Berger and Leanne Zrum have set out to be the first Canadians and the first female pair to row the Pacific, launching their specially kitted-out boat in the Great Pacific Ocean Rowing Race this June. But they're already bringing attention to the state of Earth's oceans and dedicating 10 per cent of the funds they raise to the David Suzuki Foundation.



PHOTO: RICHARD SCHMON FOR COASTAL INC

Leanne Zrum (left) and Rebecca Berger are embarking on an epic adventure to raise ocean awareness and funds for the David Suzuki Foundation.

Spending most of their spare time playing on and around the water since childhood, both have developed a profound connection to nature and a deep concern that not enough Canadians understand the ocean's true value. "Ocean paddlers have a direct experience of the enormous power of nature," Berger said. "Being right on the water is like nothing else. We're filming our journey to inspire others to protect marine ecosystems."

The rules of the race don't allow Berger and Zrum any assistance along the way.

They'll be alone in the sea—likely far away from the other 15 teams from all over the world taking part in the race. The two will take turns rowing around the clock in two-hour shifts for the 2,100-nautical-mile journey from Monterey, California, to Honolulu, Hawaii. Though it should take about 60 days, they'll have everything they need to survive for 90, including food, medical supplies, a water desalinator and solar-powered satellite communications. Follow their adventure at rowthepacific.ca.

recommended

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.

2211 West 4th Ave., Suite 219 Vancouver, B.C., Canada, V6K 4S2 Toll free 1-800-453-1533 davidsuzuki.org

Editor

Ian Hanington

Contributors

Theresa Beer, Lindsay Coulter, Manon Dubois, Ian Hanington, Winnie Hwo, Gail Mainster, Jode Roberts, Alvin Singh, Laura Timmermans, David Suzuki, Scott Wallace

Design and Production

Catherine Owsik

Board of Directors

Stephen Bronfman, Dr. Tara Cullis (President and Co-founder), Sarika Cullis-Suzuki, Severn Cullis-Suzuki, Pauline D'Ambroise (Secretary), James Hoggan (Chair), Stephanie Green, Peter Ladner, Dr. Samantha Nutt, John Ruffolo, Miles Richardson, Dr. Peter Victor, Elaine Wong (Treasurer)

Co-Founders

Dr. David Suzuki, Dr. Tara Cullis

Chief Executive Officer

Peter Robinson

Deputy Chief Executive Officer

Andrea Seale

Director, Communications and Public Engagement

Michiah Prull

Director of Finance and Technology

Vic Johnston

Program Directors

Mara Kerry, Karel Mayrand, Faisal Moola, Jay Ritchlin

Human Resources Director

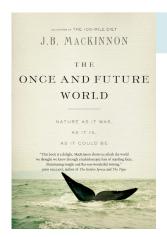
Catherine Gordon

Charitable number

Canada: BN 127756716RR0001 US: 94-3204049



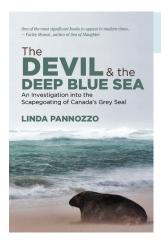
Printed on 100% postconsumer recycled paper, processed chlorine free.



The Once and Future World

J.B. MacKinnon / Random House Canada

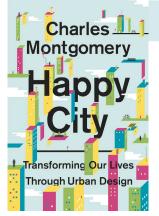
This is a highly entertaining and perspective-shifting read that stretches our sense of possibility of what cities looked like before human settlement. MacKinnon explores nature through the lens of historical ecology, or rewilding, by recounting the diversity of species that wandered natural areas we've replaced with cities. We're encouraged to remember what nature can be—imagine lions in the south of France—to better incorporate it in today's urban environments.



The Devil and the Deep Blue Sea

Linda Pannozzo / Fernwood Publishing

The Devil and the Deep Blue Sea has achieved more than a thorough scientific investigation of scapegoating marine mammals such as the grey seal in Canadian fisheries. Linda Pannozzo has done an amazing job of distilling the complexities of marine ecosystems to demonstrate the challenge of making any cause-and-effect claims about marine food webs. The devil is in the details. Understanding these complexities requires a fundamental reshaping of our perceptions around how marine ecosystem form and how humans impact them. The impeccably researched book makes for an interesting read.



Happy City: Transforming Our Lives Through Urban Design

Charles Montgomery / Doubleday Canada

More than half the world's people now live in urban areas. But cities are not always happy places. For this wide-ranging book, award-winning Vancouver writer Charles Montgomery travelled the world and examined the growing body of science around happiness to see how urban design can influence our thoughts, actions and well-being. *Happy City* is an optimistic book and a must-read for anyone interested in learning how cities, and their design, can save the world.



Watermark

Jennifer Baichwal and Edward Burtynsky / Mongrel Media

Water is life. But sometimes we take it for granted. Directed by filmmaker Jennifer Baichwal and renowned photographer Edward Burtynsky, this documentary explores the human connection to water—from the pristine watersheds of Northern B.C. to the sacred waters of India's Ganges River, from massive abalone farms in China to a surfing championship in California. This extraordinary film won the award for Best Canadian Feature in 2013. It's available at watchwatermarkmovie.com. Enter the code suzuki for \$2 off.

Neil Young uses music for the message



Recently, I had the privilege of travelling with musicians Neil Young and Diana Krall on their Honour the Treaties tour. Neil organized the concert series because of his concern about the impacts of Alberta's tar sands on First Nations in the area and the effects of the planet's largest industrial development on the air, water and ecosystems that Canada's treaties have promised to protect. He wanted to know whether Canada is a nation that lives up to its commitments.

At news conferences, he was asked why someone who is "just a musician" should be speaking out on environmental issues. He replied that in a democracy everyone has the right to express a thoughtful opinion and he was just asking Canada to live up to its promises. Right on, Neil. What he didn't say was that everyone has a stake in the quality of air, water and soil because environmentalism isn't a specialty like medicine, plumbing or music. It's a way of seeing our place in the world.

Neil has a long history of showing concern for the world and the environment. He was one of the founders of Farm Aid and helped start the Bridge School for children with severe disabilities. He admits he loves cars but doesn't like the carbon emissions produced by burning gas to run them. So he hired engineers to convert his beloved 1959 Lincoln Continental to an electric hybrid that uses vegetable oil to recharge the batteries.

As with Al Gore (and me), critics accuse Neil Young of hypocrisy when he flies in jets and uses buses to transport his staff and gear. But we don't yet have the infrastructure for a low-carbon world. Until we do, no one can live as we want to and should. Our leaders in government and industry have to move to nonpolluting, renewable energy alternatives and put infrastructure in place for us to live sustainably.

Until then, the important challenge is to get the message out and provide information to show what can be done and to inspire people from all walks of life to get involved in creating and implementing solutions—and especially to encourage our governments to live up to their promises. That was the goal of the Honour the Treaties tour.

