

# Ecology & Action

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Nurturing Peace of Mind 

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The Ecology Action Centre is a member-based environmental charity in Nova Scotia. We take leadership on critical environmental issues from biodiversity protection to climate change to environmental justice. We are grounded in community, and a strong voice and watchdog for our environment. We work to catalyze change through policy advocacy, community development and building awareness. We take a holistic approach to the environment and our economy to create a just and sustainable society. Views expressed in *Ecology & Action* are those of the writers and do not necessarily represent the EAC or its supporters.

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# Emissions Footprint

by KATHLEEN OLDS & JULIA-SIMONE RUTGERS /// EAC Volunteers

The relationship between greenhouse gas emissions and the American military has become an increasingly urgent topic among environmentalists and governments alike.

It started with a loophole in the 1997 Kyoto Protocol—a loophole hard-fought by the American negotiating team at UN climate talks. In an effort to keep the military as free from restriction as possible, US delegates successfully argued to exempt certain military activities, namely overseas operations and fuel, from rules about emission reduction.

As a result, Kyoto signatory nations were not required to report back to the UN on military emissions from international air and sea transport, or multilateral operations in other countries. While the US never signed the Kyoto Protocol in 1997, these exemptions became the norm for military emissions-reporting for several years. The latest UN climate document—the 2015 Paris Agreement—makes no reference to military emissions reporting; the word “military” doesn’t appear once in the document.

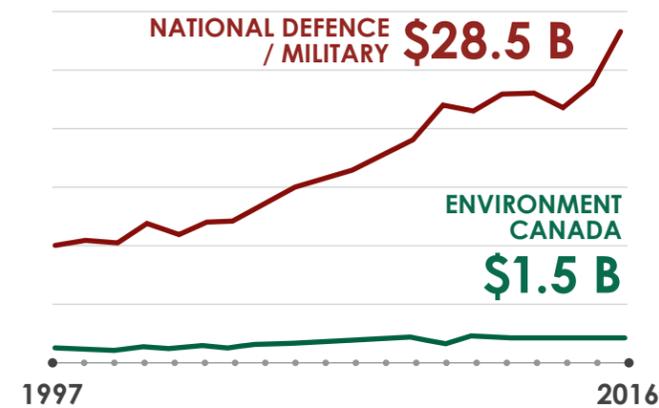
Within reported emissions, the US Department of Defence (DOD) is the largest single institutional emitter of greenhouse gases, while Canadian National Defense emits more greenhouse gas than any other national department by a factor of five. And yet, it is still difficult to know the scope of military carbon emissions.

In recent years, this careful omission of key operations and fuels from reporting has become a focal point for environmental activists. As Oil Change International director Stephen Kretzmann told the Guardian in 2015, “the atmosphere certainly counts the carbon from the military, therefore we must as well.”

In 2010, the DOD recognized climate change as a factor that magnifies security threats: “climate change will contribute to food and water scarcity, will increase the spread of disease, and may spur or exacerbate mass migration,” writes the DOD in its 2010 Quadrennial Report. They’re not alone; according to the American Security Project 70 per cent of nations worldwide, including Canada, recognized climate change as a threat to national security as of 2018.

Military development is therefore known to exacerbate the security threats they ostensibly aim to minimize—a vicious cycle fueled by fossil fuels.

## Government of Canada, Funding



Source: Public Accounts of Canada

There are two potential strategies for breaking this cycle. The first, the greening of defense, is being explored by the Canadian Government. The Defence Energy and Environment Strategy, published in 2017, outlines the Department of National Defense (DND) sustainability plan. In it, they pledged \$225 million to infrastructure projects that will aim to reduce emissions 40 per cent from 2005 levels by 2020.

In 2017 the DND reported emitting 639,619 tons of CO<sub>2</sub>—as much as an average house would emit over 48,000 years, and only an 18 per cent reduction from 2005 levels.

At the moment, much of the DND’s reported emissions come from petroleum, jet fuel, and gasoline, whose emissions per kilojoule are difficult to decrease using alternative energy sources. In addition, their emissions targets are limited to buildings and commercial vehicle fleets—all military equipment and overseas operations are exempt.

It’s impossible to say what percentage of the Canadian military’s total emissions are counted among these domestic buildings and commercial fleets, yet this is the only sector that has any target or accountability for its emissions. Within this sector, however, the DND is pursuing clean energy, waste reduction, and reduced environmental footprint.

**In 2017 the DND reported emitting 639,619 tons of CO<sub>2</sub>—as much as an average house would emit over 48,000 years, and only an 18 per cent reduction from 2005 levels.**

## Government of Canada, Federal Greenhouse Gas Emissions

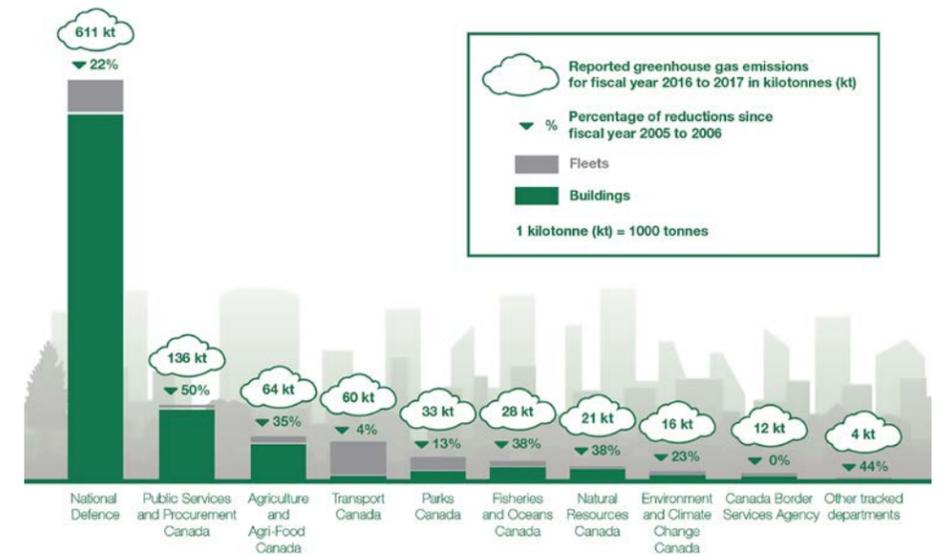


Chart: Tamara Lorincz

The second strategy is more radical—the dismantling or curtailing of the military itself. The carbon emissions from each dollar spent on defense has historically exceeded that of any other sector. Barring an unforeseen technological development, this proposition will continue to hold for domestic reported emissions. Although overseas emissions are unknown, it is reasonable to suppose that these too mostly come from jet fuel, petroleum, and gasoline and are therefore difficult to mitigate.

Grassroots movements and academics are becoming increasingly vocal about the interrelation of the military and greenhouse gas emissions. “No decarbonization without demilitarization” has become a global rallying cry. Many activists, it is important to note, explicitly recognize that the military conflicts with environmentalism on more than simply greenhouse gas emissions—some believe that the principles and ethical assumptions under which the military operates undercut both the ends and the means of sustainability.

Others also argue that the budget percentages taken up by the military undermine governmental commitments to climate action. Canada’s defense spending is projected to reach \$32 billion by 2026, while the budget for environment and climate has flatlined around the \$1 billion mark since 1997. A 2008 report from Oil Change International found that US spending on the Iraq war could have covered the global investments in renewable energy that would be sufficient to halt global warming trends by 2030.

Tamara Lorincz, a PhD candidate at the Balsillie School of International Affairs is one of Canada’s foremost experts on the link between the military and greenhouse gas emissions. She is adamant that this is a fundamental issue for environmentalists, but one that is often avoided: “Not one environmental organization and no member of Parliament takes on the military,” she says. The Intergovernmental Panel on Climate Change and UN’s Deep Decarbonization Pathways Project also seem hesitant to tackle the issue and exclude carbon emissions for the military in all their reports.

## TAKE ACTION

Talk to your MP and MLA to speak out about military expansion projects in your area. Advocate for accurate military reporting for overseas operations.

The lack of information, as well as the apparent lack of drive from prominent political figures can impede action on decreasing defense emissions. Lorincz, however, is hopeful that change can happen and can be catalyzed by individuals.

Lorincz recommends calling your MP as well as your local environmental group to organize against the buying of new fighter jets, an estimated \$40 billion which will, she predicts, purchase F-35s for the Air Force. Lorincz suggests a more specific call to action in our province, “Nova Scotians specifically have a responsibility to prevent the building of new warships in the Irving shipyard,” a \$26 billion deal that is Canada’s largest ever defense procurement contract.

The lesson she draws from her work is that “Peace has got to be fundamental to the environmental movement. If it is not, we will not succeed.”

**Kathleen** is an economics student at Dalhousie University, passionate about social and environmental justice.

**Julia-Simone** is a King’s journalism student and frequent local freelancer with a passion for uncovering truths, and making them accessible to all.

# A Crime of Convenience

by WESLEY TOURANGEAU /// EAC Volunteer

On a bright and sunny September day in Halifax, Nova Scotia, an army of volunteers from the EAC and Greenpeace Canada descended upon Turtle Grove beach—land recently returned to Millbrook First Nation. They were there to take part in World Clean Up Day, a global civic movement centred on raising awareness and cleaning up plastic waste and other human debris.

The beach at Turtle Grove was littered with plastic pieces, large and small. Mark Butler, Policy Director at EAC, was shocked by the amount of debris. “I’ve been doing beach cleanups for 23 years and this is one of the dirtiest urban beaches I’ve encountered in the HRM,” Butler says.<sup>1</sup>

The two organizations added an investigative aspect to their cleanup, a Plastic Polluters Brand Audit. Trash was organized and cataloged by type and company responsible in order to identify the major corporate contributors to plastic waste pollution in the area. “It’s time to place more responsibility on the producers of these products,” Butler says.

Brigid Rowan from Greenpeace Canada agrees: “We need to address the plastic epidemic at its source, and the source is, for economically expedient reasons, corporations choosing to mass produce and use a lot of single use plastic packaging.”<sup>2</sup>

Many eco-conscious consumers have been avoiding single-use plastics for years. Reusable water bottles and coffee mugs are common and most grocery stores sell their own brand of reusable shopping bags. There is even a push to start refusing all single-use plastics, and carrying around reusable replacements for everything.<sup>3</sup> And while a well-informed citizenry is doing its part to consume responsibly, there are calls to reframe the responsibility discourse so that less blame is placed on individuals.

In an effort to address growing environmental and health concerns, China recently stopped accepting shipments of certain types of plastics that are said to frequently arrive contaminated and poorly sorted.<sup>4</sup> This has impacted countries like Canada who export some of their plastic waste. Halifax was shipping 80 per cent of its recyclables to China.<sup>5</sup> The municipality has now had to find new places to send it.

In other parts of the world significant legal steps have been taken in attempts to curb plastic use. In the western Indian state of Maharashtra—which includes Mumbai, India’s largest city—one of the world’s strictest plastic bans came into effect earlier this year. This ban covered the production, sale, and use of many single-use plastic items, including bags, straws, cutlery, and small bottles. Ignoring this ban led to fines and even three months in jail. Backlash from plastic manufacturers and beverage giants like Pepsi and Coca-Cola have led to a relaxing of this ban, but items like plates, bags, and take-out containers remain outlawed.<sup>6</sup>

So what approach is needed in Canada, where less than 11 per cent of plastics get recycled, and the rest are incinerated, dumped in landfills, or wind up polluting our parks, lakes, and oceans?<sup>7</sup>

Environmental Defence and 46 other signatories (including EAC) are calling on the Canadian government to strive towards a zero plastic waste Canada. Included is the requirement of “enforceable Extended Producer Responsibility (EPR) legislation that makes companies financially and operationally responsible for collecting and recycling the materials they put on the market, and reducing resource consumption.” The aim of EPR is to require companies to take care of their share of the plastic waste problem. This takes pressure off of the consumer and taxpayer, making it easier to avoid plastics such as the baskets, bags, and wrapping in which many foods are sold. Manufacturers and retailers have to think about how their products are collected at end of life, and how it would be recycled.

Among the other goals they’ve asked of the Government are to ban plastics that are either harmful or difficult to recycle, phase out poorly sorted plastic waste exports, work to harmonize waste policy across Canada, and improve the capture and recycling of single-use plastics. Canada’s environmental organizations have drawn the blueprint. It’s up to government and corporations to make it happen.



**Wesley Tourangeau** is a Postdoctoral Fellow in the School for Resource and Environmental Studies at Dalhousie University. Wesley researches, writes, and teaches in the area of social and ecological sustainability. With a background in environmental studies and criminology, his research often grapples with the intersections between law, crime, and the environment.

## MILLBROOK FIRST NATION

Turtle Grove was a seasonal Mi’kmaq settlement along Kijipuktuk’s shores, on the Dartmouth side where the Nova Scotia Power generating plant now stands. Wigwams dotted the cove there all the way up to 1917, when the fire, explosion and tsunami of the Halifax Explosion devastated the community.

Mi’kmaq survivors were ignored in the disaster’s aftermath, and the community was never rebuilt. Turtle Grove’s survivors and descendants were relocated to various reserve communities, including Millbrook First Nation who recently took ownership of these land as part of an outstanding land claim. The small, tree lined cove remains unoccupied to this day, but Millbrook has plans to develop homes, businesses and a park where the community once stood.

**Acknowledgements:** Thanks are due to Environmental Defence Canada who offered their expertise to the production of this article.

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# Treaty Fishing: SO MUCH MORE THAN A GREEN JOB

photos: Robin Tress

Interview by **LAURA CUTMORE**  
Compiled by **SADIE BEATON** /// EAC Staff



When we think about a green job, we might first imagine a renewable energy tradesperson. And for sure, the work to build more energy-efficiency and clean renewable energy is a crucial piece of the work needed to help us transition to a just, low-carbon society.

But a green economy also needs teachers, farmers, fishers, artists, community builders and caregivers to lead us on the way to building this just future. While some of these green jobs are technological and innovative, other folks are fighting to continue to practice their ancestral green livelihoods.

Marilyn Leigh Francis and her nephews Sekewa't, Oeligisgag, and Gesaltingawei are Mi'kmaq rights holders who fish in Saint Mary's Bay. Their gear has adapted with the times, but their practice of stewarding life in the Bay as they provide for their families and community dates back thousands of years. Marilyn Leigh's hard work is much more than a job. And safeguarding and supporting her right to a livelihood on the water is a vital part of our just future here in unceded Mi'kmaq territory.



## What is your name and what do you do?

"I am Marilyn Leigh Francis and I'm an inherent rights fisherwoman."

## What's your work like day to day?

"It can be pretty different day to day but for the most part we wake up, we get our bait, we get our fuels, we get everything going on the water, we fish our gear, and we come in. Sometimes we sell lobster to the locals.

"We've been doing it for such a long time, it's a way of life. It's not so much like a job. It just feels good for us to do it and it makes us feel close. My spirit name is Gagamit Kiwnik and that means Standing Otter. I'm a salt water otter, so I really feel drawn to the water. I love being with it, I love being in it, I love being on it, around it, so fishing is like a lifestyle for us and I think it's something we'll do until we can't."

## How do you see yourself as part of the green economy here in Nova Scotia?

"We really try to take care of the water. And I think it's important that if you're on the water, if you're fishing in the water, if you're diving in the water, if you're swimming on the water, that you try your best to maintain it. I think it's important that we try to keep our water as clean as possible because it's affecting everybody, not just us. It's affecting our sea life, it's affecting our seaweeds, it's affecting our plants and our microorganisms and all these things. If we don't take care of it now we're not going to have it.

"We can do this as people of this land. And I'm not just talking about Native people. I'm talking people in general. It's our job. I think as humans, it is our duty to ensure that future generations still have this and that they don't have to worry about where they are going to get their resources."

## And what are you most excited about in this work?

"Being on the water is the thing that makes me feel really good. I'm providing for my family, and helping provide for more families. We give thanks. We make offerings. We do things the right way. And I genuinely love fishing. I love being with my nephews, my family.

"My nephews, they're amazing. I really try to give them the best of what I know. That way they're prepared to make sound choices when they are old enough. I want them to have a better chance than I did. I want their lives to have meaning, to have purpose, like all L'nus. To take care of people, to take care of everything.

"[And] I think it is important for L'nu to assert our treaties and inherent rights because if we don't, we're not going to be able to

hunt, fish, and take care of our families. It would be like going back to when we had to get the okay to leave the reserve. People forget that even 50 years ago we had to get permission from the Canadian government to leave the reserve and go into a town."

## What do you mean by inherent rights and treaty rights?

"My inherent right wasn't given to me by government or by a chief and council. It was given to me by my parents, it was passed on to me through my bloodline. Treaty was put in place to protect the inherent right. The inherent right that we have—the one that I fish by—is protected by the Peace and Friendship Treaty of 1752. That's about being able to fish and live without hindrance.

"It is everything because it gives me the right to protect you. To protect anyone within our territory. It's not just for L'nu people. Without it the L'nu people of L'nuacadie (Turtle Island) won't be allowed to do what we came to this earth to do, which is protect Mother Earth. Which is protect the water, the animals, the birds, protect the people.

"And now they want to give us a hard time because of a 'moderate livelihood.' Our people and our elders sat down and they made these agreements. I don't think they thought that our own people would have to defend the meaning of a moderate livelihood. Because to me a moderate livelihood is somebody's ability to live a good, safe, healthy life. There's no price tag on that."

## Any advice for others who might want to do this work?

"As L'nu people we have our right to be our own sovereign individuals. For us to be able to be L'nu. I want to be able to be safe. I want for my family to be safe. I want people to be able to fish so our families can survive. A lot of our L'nu people are on social assistance and struggle with poverty. And it's not a choice they made themselves—it was forced on them. And we have our own resources within our own territory that could stop a lot of these problems.

"We have young people taking their lives because they don't know anything else. We have a lot of young people who are suffering bad addictions. They can come out here and do good hard work and take that work home to their family and feel good about what they've done. They can feel good about putting food on their table and clothes on their backs and letting their children sleep in a safe home.

"When L'nu people swore to protect Turtle Island, and their territory, it includes the people in the territory, native and non-native alike. But we can't do that if we can't first do what we need to do. Like my son says, 'We can travel together if we stay in our lanes. There will be no accidents. But right now, people are trying to push us off of the road, and that's not safe for anybody.'"

**Sadie Beaton** and **Laura Cutmore** are really grateful for the time they got to spend with Marilyn Leigh, Sekewa't, Oeligisgag, and Gesaltingawei Francis. The interview has been condensed and edited for clarity. Pre-order your 2019 Green Jobs Calendar for more stories of folks in Nova Scotia leading the way for our green economy at [ecologyaction.ca/greenjobscalendar](http://ecologyaction.ca/greenjobscalendar)

# Thinking Outside the Box

by **DANA LIPNICKI** /// EAC Staff

The inevitable reality of death is a topic that many of us prefer to avoid. It makes us squeamish, uncomfortable, vulnerable. It is also something that we all have in common. It brings our communities together so that we can bond, mourn, and deepen our relationships with each other. It is an opportunity for us to remember and reflect on the values a person has lived, and how those values might affect us moving forward.

Growing up, I knew of just two ways that one could finalize their life: conventional cremation and conventional burial. Death in an environmental context had never crossed my mind. I suppose I assumed cremation would be a “greener” way to return to the Earth, as it takes up less physical space than a traditional gravesite. Looking into it, I discovered that conventional cremation and burial both carry a substantial environmental impact.

Cremation is the most popular alternative to burial—78 per cent of Nova Scotians currently choose cremation. The process requires large amounts of fossil fuels. During the cremation process, many different chemicals and carcinogens, including carbon dioxide, hydrochloric acid, mercury, hydrogen chloride, and nitrogen oxide, are released into the environment.

Conventional burial is not eco-friendly, either. Death Matters, a Halifax-based business, says a typical cemetery buries “4,500 litres of formaldehyde-based embalming fluid, 97 tonnes of steel, 2,000 tonnes of concrete and 56,000 board feet of tropical hardwood in every acre of space. Add to that the tonnes of cut flowers and carbon emissions from mourners’ vehicles.”

As an environmentalist, I want my values to be recognized and celebrated through death. I don’t want my remains to pollute the planet through my decomposition. Until recently, I didn’t know I had any other option. Then, a few months ago I joined a working group at the Ecology Action Centre called Green Burial Nova Scotia where I learned about the concept of green burial.

“Looking into it, I discovered that conventional cremation and burial both carry a substantial environmental impact.”

As defined by the Green Burial Society of Canada, a “Green Burial is a statement of personal values for those who seek to minimize their impact on the local and global environment. For people who are mindful of the cyclical nature of life, green burial is a spiritually fulfilling alternative to conventional burial or cremation. It is an environmentally sensitive practice: the body is returned to the earth to decompose naturally and contribute to new life.”

Green burials are not a new idea. Historically, many funerals involved burial of an unembalmed body in a simple box. The practice lost favour in the mid-19th century. But more recently, they have been making a comeback. This movement of returning to nature at the end of our life really took off in the United Kingdom in the early 1990s. At that time, 98 per cent of British people were being cremated at the end of their lives. Due to environmental concerns regarding carbon emissions and our environment, as well as the issue of expanding urbanization, green burials became an obvious part of their solution.

Green burials are now gaining popularity in the United States and Canada. In 2008, Canada’s first urban green burial site, Denman Island Natural Burial Cemetery, opened in Victoria, BC. In 2015 the Green Burial Council of Canada conducted a survey that found that the demand for green burial services across 70 cemeteries had increased by 74.6 per cent since the introduction of these options!

There are five main principles that are essential to having a green burial, as taken from the Green Burial Society of Canada’s website:

1. No Embalming—Decomposition is how the body is recycled naturally. Embalming relies on formaldehyde and other chemicals that leach into our soil and groundwater.
2. Direct Earth Burial—A shroud made of natural, biodegradable fibres dresses the body, and then is buried either directly in the grave or placed into a casket or alternative form of container made of biodegradable, sustainable materials, ideally sourced locally. No unnatural grave liners or protective vaults are used.
3. Ecological Restoration and Conservation—Local, indigenous plants, including groundcover, shrubs and trees are placed over the grave once its settled. Visitation is managed through thoughtful placement of walking paths and the occasional bench, optimally placed with a view of the communal memorial for the site. Site preservation and everlasting land protection are key components of a green burial. Covenants, protective easements and other enforceable guarantees made by the green burial cemetery operator are put in place to ensure the site will never be repurposed and the natural ecosystem protected.
4. Communal Memorialization—Individual memorials like headstones are discouraged, in favour of communal memorialization with a simple inscription. The ecology that grows there is a living memorial of that person’s life. However, GIS tracking ensures that one’s location will never be forgotten.
5. Optimize Land Use—Infrastructure is kept at a minimum, pragmatic grave sizes and section lot plans that maximize capacity are some of the considerations applied. In areas where there have been many green burials and space may be an issue, new ‘border or surplus’ zones may be created for the green burial of cremated remains using surface or subsurface disposition methods.

## OTHER WAYS TO BE GREEN THROUGH DEATH

Make your reception locally-sourced. Reduce greenhouse gas emissions created through food and flower importation, and support your local gardeners and growers one last time!

Leave a legacy gift in your will to an environmental charity like the Ecology Action Centre. Legacy Donors give us the ability to do more to protect our environment. To discuss the possibility of leaving a Legacy to the EAC in your will, contact Dana Lipnicki, at [dana@ecologyaction.ca](mailto:dana@ecologyaction.ca).

Learn more at: [ecologyaction.ca/planned-giving-0](http://ecologyaction.ca/planned-giving-0)

“We have the ability to influence the future of our planet through our death...”

At the end of one’s life, there is only one thing that is legally required: a medical certificate of death. It felt empowering to learn that everything else is up to me. Whether you choose to be buried or cremated conventionally, or be the feature in your own green burial, it is ultimately your choice how you decide to make it an ode to your values and your life story.

## ONLINE RESOURCES TO HELP YOU LEARN MORE ABOUT GREEN BURIALS IN CANADA

- [deathmatters.ca](http://deathmatters.ca)
- [naturalburialassoc.ca](http://naturalburialassoc.ca)
- [greenburialcanada.ca](http://greenburialcanada.ca)

## Fast Facts about conventional burial practices

- **2.2 million gallons** of Formaldehyde-laden embalming fluid are used in Canada every year, and funeral home workers are frequently exposed to it.
- It is estimated that a single cremation uses **92 cubic metres of natural gas** – enough to supply the average Canadian home for 12.5 days – and releases 0.8 to 5.9 grams of mercury.
- Many Jewish and Muslim burials are **green burials by tradition**.
- We have the ability to influence the future of our planet through our death... **that’s pretty cool!**
- **As of September 17, 2018**, The Green Burials Society of Canada is now accepting applications from cemeteries across the country to become a GBSC approved provider. With this exciting change, we hope to see green burials become more accessible to all.

Dana Lipnicki is the EAC’s Community Giving Manager and is a member of the Green Burial NS group.

# Nurturing Peace of Mind

by **SHAELYN SAMPSON** /// Hike NS volunteer  
and **KAREN MCKENDRY** /// EAC Staff

photos: Kenomee Trails Society

“In every walk with Nature one receives more than one seeks.”

- John Muir



How do you feel after a stroll in the forest? Relaxed? Empowered? More ready to handle life's challenges?

The vast body of research documenting the physical health benefits of time in nature has been popularized in the past few years, including in books by Richard Louv that have described for the layperson both the detriments of disconnecting from nature (“nature deficit disorder”), and the path to renewed health (more “vitamin N,” where N = nature). Time in nature has been proven to reduce physiological signs of stress, and risk of heart disease and diabetes. But it has demonstrated mental health benefits too, including reducing risk of suicide, aiding with post-traumatic distress, and helping to cope with upsetting life events. Many of these mental health boosts are amplified when hikers hike in groups.

Enter the Mood Walks project. Mood Walks comes to Nova Scotia from Ontario, and was based on knowledge that getting outside is good for mental health. The Ontario project piqued the interest of Janet Barlow, Executive Director of Hike Nova Scotia, and Alex Whynot, a medical student at Dalhousie University. The pair brought together a team of local hiking, outdoors, conservation and mental health enthusiasts, whose goal is to replicate the Ontario version, with the knowledge that “green exercise,” such as hiking, walking or urban poling, has healing properties. EAC’s Wilderness Team saw a fit as well: the more people that are exposed to positive experiences in nature, the more they’ll learn to love it, the more they’ll likely act to protect it. All agencies involved in the project will be encouraged to hike in current or potential parks and other protected areas.

Mood Walks (in Nova Scotia) will provide youth, widely defined as 15 to 29 years old, who are likely to be at a higher risk for mental health struggles, with an opportunity they may not otherwise have: to hike, and, in doing so, benefit from the physical activity and exposure to nature. Hike leaders will go through training to provide safe and enjoyable hikes, while youth participants will have a hands-on Learn to Hike session. Before and after the hikes, participants will be asked about how their mood over the past week, and for self-reflections on their hiking experience. The participating agencies will return results, opinions, struggles and successes back to Hike Nova Scotia.

Several youth-supporting agencies are confirmed to lead regular guided hikes with their youth clientele. The hikes will take place in Halifax and the surrounding area, focusing on terrains and lengths that encourage the beginner hiker, and are accessible by transit.

This series of guided hikes are only open to clients of the participating youth-supporting agencies. But don’t let that stop you from accessing the benefits of hiking in nature for yourself! Discover guided hikes near you via the Hike Nova Scotia website, your local hiking club, or join EAC on our next Biodiverse-city hike. Happy trails!

**Shaelyn** is a 23 year old Haligonian (Kjijpuktuk, Mi’kmaq Territory) living and working in Dartmouth. She has worked in mental health advocacy for four years now in various capacities and is an avid hiker, gardener and event coordinator.



**Hydrostone**

In their own personal ways, Richard Nickerson's clients work hard to leave the world a better place than they found it. For many clients, this means investment decisions that support companies which act in accordance to that client's values. Richard is a socially responsible investor and he supports his clients in choosing high quality investments that align with their values.

LEARN MORE AT: [assante.com/advisors/richardnickerson](http://assante.com/advisors/richardnickerson)



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As we build a community of active outdoor enthusiasts, we share and teach responsible outdoor recreation practices, stewarding a nation-wide appreciation and respect for the environment and increasing our access to wild forests, wetlands, mountains, urban parks, rivers, lakes and oceans where we pursue outdoor activities. We commit to conserving the ecologically and recreationally important places where we adventure and that sustain us.

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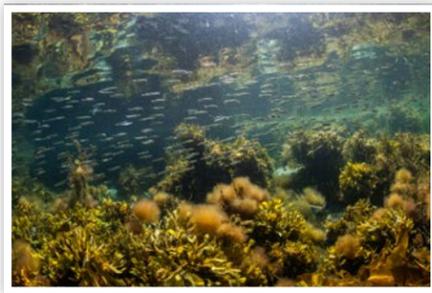
# Peace Off Our Coast

by EAC STAFF /// Images by NICK HAWKINS

Nova Scotia is known as Canada's ocean playground, but few have a chance to see what life is like off our coast. This summer, photographer Nick Hawkins spent a lot of time in Nova Scotian waters, photographing local marine life and habitats. His work is helping to shine a light on some of the most important marine areas in Atlantic Canada. Peek through Nick's lens to learn about life under the sea, why these areas are so important, and how local marine species and habitats support one another.



**Water Cycle (Port Joli):** The water cycle is a closed loop. Our rivers, streams, lakes, creeks and even roadside ditches are all connected to the oceans, and to each other. Water is precious, and is not evenly distributed around the planet. As Canadians, as Nova Scotians, we are blessed with an abundance of freshwater sources, and beautiful Maritime coastlines.



**Sand Lance:** The American sand lance (*Ammodytes americanus*) is a small schooling fish found in the shallow waters of the North Atlantic from Labrador to the Chesapeake Bay. They bury themselves as deep as six inches into the sand to hide from would-be hunters at night. These long, pointy-jawed characters feed primarily on plankton near the surface, but will sometimes attempt to tackle small clams or mussels at the seabed. Sand lance are important food source for animals higher up the food chain, including some of our most important commercial fish species like cod and salmon, and seabirds like terns and puffins inhabiting the Maritimes region.



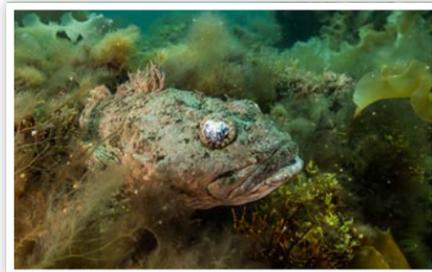
**Intertidal Zone:** If you've had the chance to get to know Nova Scotia, you've likely seen the intertidal zone—a bridge between land and water, often full of little creatures hidden in the mud or nestled along the rocky shoreline. A two-dimensional plane at low tide, the algal fronds float upwards through the water column when the sea comes in again, forming a three dimensional habitat essential to marine life in the same way a treetop canopy is to the species of the rainforest. The intertidal zone near Port Joli, Nova Scotia is dominated by a diverse community of colourful seaweeds and a vast array of accompanying biodiversity.



**Jellyfish:** Lion's mane jellyfish (*Cyanea capillata*) are the largest in the world, with tentacles that can deliver a painful sting, reaching out over 30 meters in some cases—about the same length as an adult blue whale. The lion's mane feeds primarily on zooplankton, moon jellies and tiny fish. They can also provide a floating habitat for their neighbours in the open ocean—butterfish, shrimp, prowfish and others have been known to stick close to these lanky gliders for food scraps and protection from predators. Look for these graceful, prehistoric creatures near surface waters all along the Atlantic coast.



**Eelgrass:** The waters of the Nova Scotian South Shore form a diverse mosaic of habitats, with sensitive eelgrass and kelp bed systems that function as nurseries for young fish. Not only do these areas provide food for a myriad of unique marine species, they also act as a foundation for Atlantic food webs, and as the beating heart of our coastal fisheries—important to culture and way of life in Mi'kma'ki and the Canadian Maritimes.



**Sea Ravens:** Found bottom-dwelling in sheltered bays and harbours in Atlantic Canada, the sea raven's colours often blend perfectly with their environment, making them difficult to spot. With their uniquely "pouty" appearance, and a prickly, spiny back to defend them against predators, this grumpy-looking member of the sculpin family gives off a major "leave me be" vibe. But nonetheless, keep an eye out for sea ravens (*Hemitripterae*) hidden in mud or rocky reefs around Nova Scotia.



**Kelp Fronds:** Kelp forests, like this one near Port Joli, Nova Scotia are some of the most productive ecosystems in the world. These habitats are often used as indicators of a healthy marine environment. Charles Darwin drew connections between kelp forests and terrestrial cloud forests in tropical regions, saying "if in any country a forest was destroyed, I do not believe nearly so many species of animals would perish as would here, from the destruction of kelp. Amidst the leaves of this plant numerous species of fish live, which nowhere else could find food or shelter; with their destruction the many cormorants and other fishing birds, the otters, seals and porpoise, would soon perish also."



**Shore Birds (Piping Plover):** Piping plovers (*Charadrius melodus*) are one of the most iconic east coast shorebirds. They depend on coastal environments for food, foraging for aquatic insects, marine worms, and crustaceans. In Canada, plovers are considered a species at risk. Experts estimate a population of less than 100 breeding pairs in the wild—a significant decrease from 1990s population counts. One of the major threats to the piping plover is habitat destruction. They typically nest on sand or gravel beaches, rearing their young in raised dunes or marram grass. These beachy habitats tend to be the same ones that we like to play at on vacation, including along the South Shore of Nova Scotia.



## Protecting Marine Habitats:

At the EAC, we're working with Nick and our partners across the country to help Canada meet its international obligation to protect 10 per cent of Canadian waters by 2020.

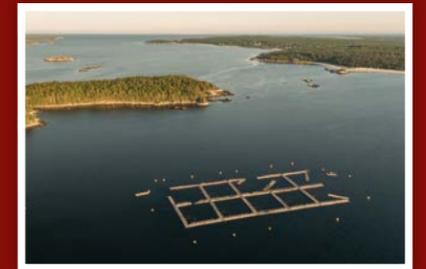
For those of us who live near the sea, eat from the sea, or generally love the ocean vistas and salty, seaside air of the Maritimes, it is our responsibility to preserve marine ecosystems. Our non-human neighbours in the ocean need space free from human influence, where they can live out their lives in peace, and flourish beneath the surface. With stewarding communities to support them, protected spaces like Canada's marine protected areas can allow for a healthy marine environment and an abundance of life to support our wild fisheries.

**Nick Hawkins** is an acclaimed nature photographer and photojournalist from New Brunswick. He has produced featured articles for Canadian Geographic, BBC Wildlife Magazine, and Canadian Wildlife Magazine, and was featured in the prestigious BBC Wildlife Photographer of the Year awards. He is currently working with the Ecology Action Centre to capture the beauty, fragility, and economic opportunity within the vast waters surrounding Nova Scotia.

## Threats:



**Green Crabs:** European green crab (*Carcinus maenas*), are just one of many invasive marine species new to the Northwest Atlantic. They originally arrived at our shores in the 1980s from Northeast Atlantic and Baltic seas, likely as incidental "stowaways" on bulk transport ships travelling internationally. These unassuming crustaceans have wreaked havoc on Maritime ecosystems, outcompeting native species for food, and destroying eelgrass in their pursuit of shellfish.



**Open Net-Pen Aquaculture:** This open net-pen aquaculture facility was photographed near Port Mouton in Nova Scotia. It's been a controversial topic in our region, pitting potential economic benefit against major environmental risks. Impacts on local biodiversity can range from disease and parasite transfer to wild fish to nutrient pollution from fish feces, and uneaten feed. To ensure the health of Canada's marine ecosystems, we've been calling for no open net finfish aquaculture in Marine Protected Areas, advocating for a transition away from this type of aquaculture in Nova Scotia in favour of sustainable shellfish operations and land based, closed containment finfish.

# Building A Future of Peace and Friendship

by SADIE BEATON /// EAC Staff

As a settler on Mi'kmaq lands, I have a lot to learn about Peace and Friendship. Some of my ancestors came to settle here in Mi'kma'ki during the time that treaties were first drawn up between Mi'kmaq Nation and the British crown. But even though the treaties are the law of the land, I never heard about them growing up. When I learned about relationships between Mi'kmaq communities and settlers at school, it was always in the past tense, punctuated with pioneer cabins made from popsicle sticks.

Meanwhile, Mi'kmaq folks have known all along that a blueprint for us to live well together is encoded in the Peace and Friendship treaties. I'm beginning to understand how these treaties might help us remember and re-imagine different ways to relate to each other and the land. Importantly, the Peace and Friendship Treaties are also the law here—a fact affirmed by the Supreme Court time and again, including the Marshall Decision in 1999 that reaffirmed the Mi'kmaq treaty right to fish.

I'm still learning, but I wanted to share some excerpts of conversations I have had about the treaties with Mi'kmaq rights holders.

**Rebecca Moore:** “Here on the east coast of Canada—and in some of the States—we are in unceded Mi'kmaq territory. That is unsurrendered territory where Mi'kmaq people still hold inherent title. In Mi'kmaq territory we have the strongest treaties with the crown. What we have to realize is that there is more than one nation that has jurisdiction on these lands. Not just Canada—the Mi'kmaq Nation also has jurisdiction here.”

**Cathy Martin:** “We signed a Peace and Friendship because the British were having a very difficult time conquering us. The British just could not, after a hundred year war on the water, figure out how to beat us. So they asked us to have a Peace and Friendship treaty, whereby we wouldn't attack and they wouldn't attack, and that as long as we did that, there would be certain things that everybody agreed upon. That we as Mi'kmaq live according to the way of life that we always lived for 14,000-something years, and that we as Mi'kmaq were able to continue to be who we are and that they as British, and those they signed on behalf of, would also be able to live according to what they set out in their parts of the treaty. And so, in 1752, our ancestors, very, very smart, knowing people about the next seven generations ahead, signed this Peace and Friendship treaty.”

**Barbara Low:** “Here in Mi'kma'ki, I wouldn't say that the land is stolen, I would say that it is misappropriated. Our treaty is about sharing so we by no means never have and probably never will ask the settlers to leave. We have always welcomed people here, even the uninvited, and we always will, because that is what we are about. Because we actually value true peace and true friendship. When we say peace it is not the absence of war it is the existence of good living for everyone. That's when there is peace. When everyone is fed, when everyone is comforted and comfortable that is peace. We don't have a right even as L'nu in these lands to say what can and cannot live here, or who can and cannot live here. It is however our place to instruct on how to live here if you are going to.”

“...friendship will be the soil from which a new politics will emerge.”

-Ivan Illyich

**Cathy Martin:** “The British, soon after they signed the Peace and Friendship Treaty, quickly stopped honouring that treaty, and that's a long history. But in 1985, there was the Jim Simon case, where we won the right to hunt based on Jim Simon being arrested for hunting out of season, and in 1999, the Junior Marshall case, where Marshall, who spent 11 years in jail for a murder he didn't commit, went fishing eels according to his tradition. He was arrested and fined for fishing out of season, and we took that to court and we won.”

**Madonna Bernard:** “Us as grassroots indigenous people, we think seven generations ahead; we always have. That's why we have these inherent rights to protect Mother Earth. It's in our DNA to protect the next seven generations of not just our own people, of all people, of the air, the water, the land, the animals, all of it. You know, it's there to protect everybody. That's why when we say we are all treaty people, that's what we mean by we are all treaty people. You know, but it's the indigenous people that have to move that, with our allies side by side.”

**Jim Maloney:** “I agree that we are a treaty people, and I have heard the Premier say that. His treaty is on the paper. My treaty is on land. My tracks on my ground: that's my signature, not on a piece of paper. From 1925 – 1952 it was against the law for any lawyer to represent any Mi'kmaq or any indigenous person across Canada in the courts. They would have been thrown in jail and charged for doing that if you were trying to protect any indigenous person's inherent rights. The pie is already cut up and the pie is already divided out and now there is crumbs in the plate. So now we need your help. We need the alliances to work together because water and air and treaties and resources and food are all our interests.”

**Michelle Paul:** “We have treaty. We have to uphold it. If the colonial power is not going to honour it, then what are we supposed to do? We must resist. That's what Elsipogtog was all about, it is what Alton Gas is all about. It is certainly what Idle No More is all about. We've been resisting for five hundred years. When are they going to realize we are not going to stop resisting?”

Sadie Beaton feels immensely grateful for the generosity of Rebecca Moore, Madonna Bernard, Barbara Low, Sipekne'katik Warrior Chief Jim Maloney, Michelle Paul, Cathy Martin and so many other Mi'kmaq folks on the many kinds of front lines. You can hear more of these conversations throughout the Shades of Green environmental justice podcast series, part of a case study project with the Community Conservation Research Network. It's available on Apple Podcasts or at [ecologyaction.ca/news/shades-green-exploring-environmental-justice-nova-scotia](https://ecologyaction.ca/news/shades-green-exploring-environmental-justice-nova-scotia)



# Mirroring the Ecosystem

by **STEPHANIE JOHNSTONE-LAURETTE** /// EAC Staff

When you hear the title Moose Management Coordinator you might assume a role that is specific to natural resource management, someone out in the woods gathering data on *Alces alces andersoni*. But for Clifford Paul of the Unama'ki Institute of Natural Resources (UINR) this role goes much deeper. Paul shared some insight into the scope of moose management in Unama'ki (Cape Breton) and how his work weaves into supporting the local ecosystems as well as the Mi'kmaq communities across Unama'ki.

*(The following is an abridged version of the interview with Clifford Paul, conducted by Stephanie Johnstone-Laurette for the EAC's 2019 Green Jobs Calendar.)*

## Tell us a bit about your organization/business, and what your day-to-day work looks like.

UINR is the environmental voice for Unama'ki. We partner with the government and other agencies with similar goals to us. I work in such a way so that I stay true to the Mi'kmaq values that are instilled in me. I help manage the moose (tiam) in Unama'ki. I follow both a traditional path and a Western scientific path. I use this Two-Eyed Seeing approach which blends the strengths of each of these into a moose management plan.

My office is in the field, basically. But I also provide education on the Mi'kmaq approach to ecosystem management, with a focus on moose management. You'll see me out in the community, teaching everyone from the top level RCMP all the way to the Mountainview grade two classroom through the Two-Eyed Seeing model. I'm not only a student of Two-Eyed Seeing, but a practitioner.

## How do you see your work supporting the green economy in Nova Scotia?

My work overlaps with many different sectors. It helps the green economy by sharing with others and impacting how they see the environment. I talk to young people that are considering their careers in natural resource management or green energy, I tell them that careers like this can become pigeon-holed. But an ecosystem does not operate that way. There is a relationship between every member of an ecosystem, between the insects, the plants, the animals, the bears, the berries. I can't just be a moose manager and make moose management decisions. There are relationships between everything that occurs within an ecosystem—our work should mirror that.

## What part of your work are you most excited about?

What really gets me going is when we hunt or fish and bring the food back to the communities. That's not only my work, that's my life. I'm a traditional harvester. I hunt for the community, the Elders, and provide food for those that, on their limited income, find it hard to meet their basic needs.

I provide, and I teach. It's the satisfaction of seeing a young person being involved in the hunt and then have them share it with the Elders. To me that's more successful than taking a course and getting a certificate. The legacy is not going to be an academic paper on a wall, for me, the legacy that is the change that has been made in the hearts and minds of the people. So my focus is on education, showing the way, guiding the next generation. The legacy is in the change.

I've been working hard for 12 years to bring change, and this only happened because of working with the communities. I wasn't the change, I was the conduit for change. There's lots of conversations, and that's what brings about the change. When we first went around to the communities to build a moose management plan, community members moved from saying "They should do this" to "We should do this. We're the ones that will assert our rights and our responsibilities." This has led to a strong moose management plan that involves the whole community. It's about stewardship and being connected, and it works.



photos: UINR

## How did you find your path to this work in Nova Scotia?

After many years in the workforce I went back to school and took the integrated science program at what is now Cape Breton University. Chief Terry Paul placed me on two committees with Parks Canada, one of these was for moose management. At the time the hunting was bad. It was a really bad relationship with Mother Earth, it was a really bad relationship with the families, and it was dangerous.

One day my cousin dropped by and mentioned the UINR moose management job to me and said, "They're calling your name, you should apply, they need someone to help make change." Later my brother said he had a dream of me doing good things with moose. He said I better apply. So I got an interview, I answered with my heart. And I got the job—it's spectacular!

## Do you have any advice for others looking to pursue similar work (or green jobs) in Nova Scotia?

I'd love to see more people get involved in stewardship, but also to promote the model of traditional ecosystem management, ensuring a broad spectrum of ideas, input and awareness. The Mi'kmaq are not linear thinkers, we think in waves and patterns of flux and motion. A perfect fit for ecosystems, which do the same. We ask if the work I'm doing today is going to positively impact the next seven generations? Are my ancestors seven generations back going to be proud of me?

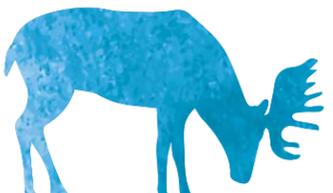


## What do you think the Nova Scotia government could do to further support and expand green jobs in our province?

The NS Government is commanded by law to work with the Mi'kmaq, to work close with our leadership. We must be seen not only as a partner, but an ally. The government must establish significant relationships with the Mi'kmaq and set examples for the rest of the country.

## What else would you like to tell us about your work, and why you think it's important?

I'm just one, but at UINR we're a team. We use a holistic approach to keep each other informed and support each other. We have guidance from our Elders and from our youth. I'd love to see other agencies and government to do the same. If people learned from that model they could achieve greater things. At UINR that's how we do it. We're all conduits of change.



**Stephanie Johnstone-Laurette** is the Youth Active Transportation Coordinator for Eastern NS; she works and plays in Unama'ki (Cape Breton) and loves when she's lucky enough to see a tiam (moose).

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"As long time proud supporters with passionate concerns for the environment, it was easy for us to decide to leave a gift to the EAC in our wills. We have long respected the work EAC does for the environment and know that its strong voice must continue into the future." - Karen Hollett & Fred Harrington

# The Seasonal Gourmet

by **CHIATI SETH** /// EAC Volunteer

## Fall Vegetable Casserole

Fall in Nova Scotia is a bountiful and busy time of year. This casserole has all the qualifications of a seasonal, fall recipe—it's colourful, adaptable, packed with veggies, and comes together without much fuss or a mound of dishes. Feel free to play with what is locally available—replace the eggplant with mushrooms, leave out the peppers, or swap the rice for oat groats. This warm, hearty and gooey casserole will still taste delicious. This recipe makes enough for 4 substantial portions plus some leftovers for school, work or home lunches!



### INGREDIENTS

- 1 cup brown rice
- 1 large eggplant, coarsely diced
- 4 medium carrots, finely diced
- 4 celery stalks, thinly sliced
- 1 large onion, finely diced
- 1 red pepper, diced
- 3-6 cloves garlic, minced
- 3 tbsp. fresh oregano
- 1 ½ tsp. dried thyme
- 1 cup mozzarella, grated
- ¼ cup parmesan, grated
- 1 ½ cups vegetable stock
- 1 tbsp. lemon juice
- 3 medium tomatoes, sliced
- Salt and pepper
- Olive oil

### DIRECTIONS

- 1 Preheat oven to 400°F. Put the rice in a saucepan with 2 cups of water. Bring to a boil, then reduce to a simmer and leave to cook while you prepare the other ingredients.
- 2 Heat a little olive oil in a skillet on medium-high heat. Once hot, add the eggplant and allow to cook undisturbed for 5-7 minutes until nicely browned. Flip and repeat on the other side. Remove from pan and place in a large mixing bowl.
- 3 In the same skillet, cook the carrots and celery for 8-10 minutes, adding a little olive oil if necessary, and stirring occasionally. Add carrots and celery to the bowl with the eggplant.
- 4 Finally, cook the onions, garlic and peppers in the skillet until the onions are translucent. Add to the mixing bowl along with the cooked rice, oregano, thyme, mozzarella, parmesan, lemon juice and salt and pepper to taste. Mix together, add the vegetable stock and transfer to a baking dish. Top with sliced tomatoes and bake for 40 minutes. Enjoy!

**Chiati Seth** is an avid home gardener and cook who loves to grow and eat food! She works on helping build healthy and sustainable local food systems near Wolfville, Nova Scotia.



The 2019 Green Jobs Calendar is now available.

12 new inspiring people from across Nova Scotia who work in our growing, green economy.

Order online: [ecologyaction.ca/greenjobscalendar](http://ecologyaction.ca/greenjobscalendar)

# Action is our Middle Name

## ENERGY

### Inclusive Energy Action Now

Recently the Intergovernmental Panel on Climate Change (IPCC) reported on the impacts of global warming of 1.5 °C. This report emphasizes the need for innovation and action in order to mitigate the unpredictability and difficulty of the future. The Energy Action Team continues its action in trying to usher in a just, inclusive and innovative transition to a green economy and fossil-free future. Recently the Climate Jobs Project, funded by the Catherine Donnelly Foundation, successfully wrapped up. It was a climate focused community development project, working with underrepresented communities in Nova Scotia. The 2030 Declaration was also launched. With a network of collaborators and a growing list of signatories, the 2030 Declaration calls for a 50 per cent reduction of greenhouse gas emissions, from 1990 levels, by the year 2030. Finally, the annual Green Jobs Calendar, featuring individuals in many fields, is now ready for purchase online or at the EAC!

## FOOD

### Food Leadership

The second "Community Food Leaders" certificate program was launched in Halifax, Cape Breton, and Cumberland County! Participants, leading local food initiatives, meet regularly to explore topics such as food justice, fermentation, and fundraising. In October, the Halifax Food Policy Alliance (HFPA) alongside Community Health Boards co-hosted a food policy workshop in Halifax. There, community organizations learned about food policy change, the proposed food charter, and various opportunities for taking action together for food. In Southeast New Brunswick, Our Food SENB partnered with the Francophone South School District to expand "Apprenti en Action", a pilot program whose four pillars are: cultivating, cooking, tasting, and appreciating food; aiming to bring back basic food literacy to the classroom, in homes, and within our communities. Also in SENB, the Regional Food Pledge has been endorsed by seven more municipalities and local service districts! The food team continues to promote learning, collaboration, and food leadership throughout the region.

## COASTAL & WATER

### Protecting Our Coast

The Coastal Team continues working alongside the Dept. of Environment to offer our support and expertise as they draft a Coastal Protection Act for Nova Scotia. We've hosted community conversations in Chester, Wolfville, Shelburne, Baddeck and Antigonish. We've also been gathering specific examples of inappropriate coastal development and negative impacts on coastal systems (from the many, many inquiries we receive) and sharing that information. We will be working hard to ensure that the Coastal Protection Act prevents these situations in the future.

Our work continues on the ECoAS project. Sea-level rise workshops are now finished in N.S., N.B., N.L. and P.E.I. and about to begin in B.C.

This Fall, we are working with a group of Management Without Borders students from Dalhousie to identify coastal adaptation strategies and programs from around the globe.

## WILDERNESS

### Pulp Mill Protest, Forestry Report & Connecting with Urban Wilderness

In July we helped organize one of the largest environmental protest in Nova Scotia's history: The #NoPipe Land & Sea Rally brought over 3,500 citizens together in and on Pictou Harbour to oppose the plan by Northern Pulp to pump up to 90 million liters of toxic pulp mill waste directly into the Northumberland Strait via an underwater pipe. Meanwhile we participated in the Independent Review of Forestry Practices conducted by Professor Bill Lahey and welcomed the release of his report in late August. In early September we released our review of the Lahey report, outlining the good, the bad and the missing. In Halifax we held a public hike in the magnificent old growth forest of the Sandy Lake area in Bedford to promote its protection and, in partnership with the new Friends of Blue Mountain Birch Cove Lakes Society, hosted a canoe trip into that area with Halifax Mayor Mike Savage and city CAO Jacque Dube, to promote the creation of the long-overdue Regional Park there.

## TRANSPORTATION

### New Season, New Act, New Space

After steady public pressure and input we were excited to see the new Traffic Safety Act, include some major active transportation stakeholder recommendations, specifically the recognition of Vulnerable Road Users. The act was tabled in early October. Many of these key recommendations should be developed over the next two years under the regulatory framework. As members of the Road Safety Advisory Committee, we will continue to work with our partners to improve policies and regulations for all road users. Bike Again and Welcoming Wheels are "wheely happy" with their new space at 5664 Charles St (Halifax) to better serve community biking needs! Check out their Facebook pages for our hours and other details. And our team jumped into Fall active transportation events with International Walk to School Month, which brought in over 13,000 students and 60+ schools participating across the province, boasting our highest numbers in years!

## MARINE

### Action in the Ocean: Protecting Ancient Sharks and Eco-Accountability

A culmination of three years of work by EAC Marine and our international partners recently saw Greenland sharks protected from direct fishing in the High Seas of the North Atlantic. These fascinating sharks, found in Canadian waters, reproduce slowly and can live upwards of 400 years, making them the longest-lived vertebrate on the planet and extremely vulnerable to fishing.

EAC's September beach pollution brand audit, on World Cleanup Day at the Halifax Harbour, was part of a nationwide collaboration with Greenpeace Canada to audit the marine debris choking our oceans, pushing governments and big-name corporations to reduce plastic production.

As SeaChoice, we released the first global review of all salmon farming operations certified by the Aquaculture Stewardship Council eco-label. We found only about 20 per cent of salmon farms bearing this eco-label actually met the certification criteria. Through watchdog reports like this one, we work to ensure that eco-friendly labels represent truly eco-friendly seafood products.



Thank you for another simply delicious evening!



A huge thank-you to The Wooden Monkey, and to all our chefs, artists, sponsors, and volunteers for making our 5th annual Perfect World event such a beautiful success.

Presented by the  
**SUSTAINABILITY ALLIES OF**  
**Ecology Action Centre**

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# SUSTAINABLE SPRAY-FREE

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The Ecology Action Centre has provided Haligonians with a source for sustainably grown, spray-free Christmas Trees since 1992. Our trees come from the farm of **Kevin Veinotte, a 7<sup>th</sup> generation farmer who lives in LaHave** with his wife Susan and their family.

“We still grow, shear, and harvest the trees in much the same way. **Balsams grow so well here that we choose not to fertilize or spray with chemicals. The bushes and undergrowth are cut by hand, and the aphids are kept in check with ladybugs.**” - Kevin Veinotte



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