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Ecology Action Centre

Ecology & Action is published two times a year by the Ecology Action Centre (the EAC), a charitable organization (PM Registration # 40050204).

The EAC is a member-based environmental charity in Nova Scotia / Mi'kma'ki. 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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Letter from the Centre

WE LOVE HEARING FROM YOU! EMAIL YOUR THOUGHTS TO MAGAZINE@ECOLOGYACTION.CA

When we first started to work on this issue of Ecology & Action, which has the theme of climate justice, it quickly became clear that it would be incomplete if we didn't try to centre writers who face the biggest impacts from the climate crisis due to systemic injustices.

Mainstream environmentalism has had low representation of BIPOC, low-income, 2LGBTQ+, disabled and other marginalized voices. Because of historic and ongoing inequities, climate vulnerability – the degree that a system will be affected by, or can't cope with, the effects of climate change – is worse in these communities.

That's why for this issue, we put out a public call for submissions from writers who identify as BIPOC, 2SLGBTQ+, disabled, low-income, migrants, youth or as part of another equity-deserving community. We have paid each writer for their contribution – a first for this volunteerled magazine. For this issue we've also decided to keep editing of the articles to a minimum because these are lived experiences, and the enforcement of "standardized language" has been used throughout history as a tool of oppression.

LEAVE A LASTING IMPACT Make a legacy gift to the Ecology Action Centre



When you leave a gift to the EAC in your will, your commitment to support environmental protection beyond your lifetime ensures that we can keep our voice independent and strong for years to come. Use your legacy to build a sustainable and equitable future for all.

To discuss your lasting impact, please contact community giving manager, Paula Aceto at 902-448-9845.

Moving forward, we plan to offer an honorarium to a writer

from an underrepresented group in every issue of Ecology & Action magazine.

In this issue you'll read about what a changing climate means for the day-to-day life of people with disabilities, how corporate courts in the United Kingdom and Europe impede climate justice when fossil fuel projects are cancelled and how BIPOC communities have been affected by discriminatory environmental policies and regulations in Canada.

You'll also learn how decolonization and tackling the housing crisis are linked to the climate, how women's seed conservation practices in India are making them more resilient and why climate action and queer liberation go hand-in-hand.

We hope these articles change your way of thinking about the many ways that climate justice can – and must – take place in our communities.



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Queer Climate Justice

by JARA DE HOOG

The world is facing an unprecedented political and ecological tipping point – one that is written in the language of fire, drought, flooding and extreme heat. But it's not just temperature records that are breaking. In the United States, jurisdictions have already passed more anti-2SLGBTQ+ bills in 2023 than in any year previous. And new educational policies in New Brunswick and Saskatchewan indicate that, distressingly, Canada may not be that far behind our neighbours to the South.

And yet, queer liberation and climate justice movements are often highly isolated from one another, fighting for what they believe to be separate causes. Right-wing movements have clearly dispensed with this false separation, attacking queerness and the climate with equal hostility. For example, a Republican congressman mockingly asked "what pronouns forest fires use" as deadly wildfire smoke blanketed the American East Coast earlier this summer. It is becoming increasingly clear that those of us fighting for a loving and abundant world must respond by connecting our own struggles, advancing climate justice and queer liberation simultaneously. Our future depends on it.

So, what connects these two seemingly unrelated movements? To start, we can recognize that gendered oppression and environmental destruction have been historically intertwined. Trying to eradicate the long-standing gender diversity present in many of Turtle Island's Indigenous populations and replace it with strictly binary European gender roles was crucial to the colonizers' quest to destroy Indigenous cultures, steal their land and extract its wealth. Our modern profit-based economy of capitalism arose from this environmental and gendered destruction, and its legacy follows us closely. Whenever cracks in the system become visible, patriarchal leaders consistently scapegoat queer people to distract from how the system is failing us all. It is happening right now in the U.S. and the U.K.: instead of admitting that climate change exposes the fatal flaws in their economic logic, right-wing leaders are doubling down on their threatened petro-masculinity by re-asserting their urge to control and do harm, be it to queer people or the atmosphere.

The queer and climate justice movements are also concretely related because queer people, who are statistically more likely to be economically disadvantaged, are more vulnerable to climate disasters. For example, because of family rejection and employment discrimination, trans people are many times more likely than cisgendered people to be homeless at any given time, and those experiencing homelessness are much more vulnerable to climate threats such as flooding and heat waves.

TAKE ACTION

If you identify as queer, try going to a climate event and reflect on how included you felt there. If you feel comfortable doing so, offer advice or feedback to organizers. Whoever you are, you can also donate money or time to intersectional organizations such as 350.org, Every One Every Day Halifax or the EAC.

Another connection is that queer liberation and climate justice are both committed to a safe and just future. Although the movements focus on what these concepts each mean to them, the common goal

It seems clear that the climate justice and queer liberation movements is a world where life in all its diversity is seen as inherently valuable. could benefit greatly from closer collaboration. There are many These common values are an ideal place to start aligning the two ways that we can make this happen equitably and effectively. Both movements. movements need to devote time and resources to understanding each other's perspectives by sharing knowledge and building lasting Clearly, the climate justice and queer liberation movements have presence in each other's movements. They also need to adjust their much to gain from each other's victories. But is there, as some own practices to be more equitable. The climate movement has have suggested, a danger that collaboration would just muddy the been historically unsure about how central queer liberation should waters? Organizing history suggests otherwise. be in its cause, but a "queered" climate movement would know that 2SLGBTQ+ communities' pre-existing vulnerabilities, such as If movements build links according to their shared values and housing insecurity, personal trauma and healthcare discrimination, make us especially vulnerable to the destabilizing effects of climate change. It would back up this recognition with time and money for queer mutual aid organizations. Meanwhile, an environmentally informed queer movement would address its complicity in other oppressive systems. This would certainly mean distancing itself from corporations who distract from their destructive activities with superficial support for the queer community. If these movements want to truly stand for all their communities, they should let their most marginalized members lead, but avoid policing who "qualifies" as marginalized enough.

unique perspectives, they can build a whole greater than the sum of its parts. To realize an ideal future, each movement has bold demands, be they to restructure our growth-centred economy or redefine gender and sexuality. These demands need support of communities outside the movement to have any hope of happening. If the movements work to present these demands as unified, rather than separate or competing, they are more likely to garner the largescale support required to change the world. These demands could be further integrated with those of other movements like feminism and anti-racism to create a movement for the liberation of all, supercharged by the urgent timing of the climate crisis. This type of cross-movement organizing has repeatedly shown its effectiveness We are all whole human beings, none of our lives defined by a in recent history - from the Lesbians and Gays Support the Miners single issue. We are inseparable from our human and non-human (LGSM) alliance working in solidarity with striking coal miners communities, which means that no one can be truly free while in 1984, to the Black Panthers' work supporting disability rights others are subjugated. As scary as the climate crisis is, it is also activists in the 70's, all the way back to collaborative resistance to an opportunity to demand everything we have previously been Nazi occupation during the Second World War. When trying to too afraid to ask for, since the future depends on it. By working change the world, solidarity might be the best tool we have. together – not just between the queer liberation and climate justice movements, but between all movements fighting for a better future Queer people also have unique lived experiences to bring to the - we stand the best chance of victory.

climate movement. Living as an out queer person, in a society that, at best, struggles to understand us and, at worst, outright villainizes We need a world where all life forms, not just the privileged few, us, takes immense bravery. In the context of climate justice, are recognized for the gift that they are, and given the support they our thick skin and practiced self-assurance can help us confront need. We needed that world yesterday, but, as it is, tomorrow will powerful political and business interests and keep us going when have to do. these interests try to discredit us.

The climate movement also has a unique perspective on intersectionality, or the ways that multiple oppressions overlap, from which parts of the mainstream queer movement could benefit. Liberation for all 2SLGBTQ+ people requires considering those of us who are BIPOC, low-income, disabled or otherwise marginalized by society. These groups are not well-served by close partnership with large corporations, which some advocates of queer rights welcome uncritically. Many of these corporate "allies," while paying lip service to queer people, actively reinforce other systems of oppression – for example, by financing pipeline projects through Indigenous land. The climate justice movement is familiar with intersectionality, as it (at least in its best form) strategically prioritizes those who experience multiple forms of oppression and are therefore more vulnerable to climate disaster. Building this perspective in parts of the mainstream queer movement where it is currently absent would bring a deeper understanding of how to make the world better for all queer people, not just cis white ones.

Jara (she/her) is an honours student in environmental science who takes an interest in how human politics interact with the web of life. She spends her time researching, biking, swimming outdoors and gardening.

To Think of a Nation Is to Think of Its Land: **ECOCIDE IN UKRAINE**

by KATERYNA RUDENKO

On June 29, 2023, Greta Thunberg visited Kyiv, the capital of Ukraine. Among senior European political figures and representatives of Ukrainian environmental organisations, she acknowledged that Ukrainian nature is a victim of Russia-induced ecocide. This is a deliberate act committed with knowledge that there is a substantial likelihood of mass damage to the environment being caused, according to the definition of the Stop Ecocide Foundation. At that time, the Ukrainian environment had already suffered eight years of negative environmental impact caused by Russian military aggression, starting with the annexation of Crimea in 2014 and the war on Donbas, which began that same year.

Thunberg's visit was a response to the destruction of the Kakhovka dam in the South of Ukraine on June 6, a disaster that killed people and animals, forced thousands to flee and substantially damaged the region's ecosystems. She criticized the international response to the ecocide in Ukraine. Although it might seem that news outlets talk excessively about the current war state in Ukraine, Thunberg is right that there is hardly any action done concerning the negative environmental implications of Russian military advances.

To be honest, it feels slightly strange to discuss the environmental impact of Russia's invasion of Ukraine when the human scale is so massive - as if the death toll of this war alone were not enough. But in a time of climate crisis, it is impossible to ignore the fact that global efforts to mitigate and adapt to climate change are being undermined by Russian aggression. Ukrainian nature as a victim of the war - and the stress this causes to human systems - is nothing new. The UN World Food Programme (WFP) is highly reliant on Ukrainian grain. According to Reuters, this year the WFP purchased 80 per cent of its wheat from Ukraine and exported it to Afghanistan, Djibouti, Ethiopia, Kenya, Somalia, Sudan and Yemen to combat a global food crisis caused in part by climate change. Not only is Russia making efforts to block this process (known as the Black Sea Grain Initiative), but vast portions of Ukranian agricultural lands are being burnt to ashes as the war continues, meaning disruptions to global food systems for years to come.

For some people, this line of thought leads to wondering why Ukraine would not cease fighting to save people and the environment. Then, Russia could subjugate the state entirely and trade the stolen grain.

There is so much to say here in response. We could talk about continuous Russian imperialism and threats to Poland and the Baltic countries, about Indigenous people of vast areas of Eurasia who Russia colonised and, in some cases, exterminated, and about hundreds of years of Ukrainian resistance to the Russian colonial regime. In his 1953 article, Raphael Lemkin, who coined the term "genocide," called Soviet genocidal policies in Ukraine "the longest and broadest experiment in Russification - the destruction of the Ukrainian nation." A vast body of research connects genocide and the destruction of culture to ecocide, primarily due to the undeniable connection between native cultures and their land. Human civilisation is born out of interaction with nature.

Craters from Russian shellings near Marinka in the Donetsk region (East of Ukraine). PHOTO: Kostiantyn Liberov & Vlada Liberova / war.ukraine.ua/photos

> Kateryna (she/her) is a research assistant at Dalhousie University School for Resource and Environmental Studies with a background in International Relations. The start of Russia's full-scale invasion of Ukraine in February 2022 forced Kateryna to leave her homeland, Ukraine

Destruction of the environment by an aggressor, thus, destroys traditional ways of living.

Ukraine has the right to exist as a nation within its own ancestral land. If we treat the environment as merely a commodity, it is easy to ignore the link between the Ukrainian nation and nature. However, for Ukrainians, our nature is our soul. Ukraine's fight will continue regardless of international support. Our land is not a mere possession; our land *is* us.

TAKE ACTION

Sign a petition at stopecocideukraine.org. Share information about the environmental impact of the Russian invasion of Ukraine and its global consequences. In your speech and writing, we ask you to recognize who is an aggressor and a victim explicitly. Condemn the aggressor. Listen to the victim.



Disability and Climate Chaos

by JEN POWLEY

Like every other creature inhabiting this orb, people with disabilities will be impacted by rising temperatures and species change. I am a member of that group. I have progressive multiple sclerosis. I used to work at the Ecology Action Centre but left in 2013 when I no longer had enough voice to be heard in a meeting.

I am not alone. According to Accessible Nova Scotia, nearly one in three Nova Scotians identify as having a disability. The percentage varies with age. For youth aged 15 to 24 the rate is 21 per cent, for working aged adults (25-64) the rate is 29 per cent and for adults over 65 the rate is 41 per cent.¹ A disability can fall into any of the following categories: pain related, flexibility, mobility, dexterity, mental health related, hearing, seeing, memory, learning and developmental. Yet the needs of people with disabilities are often forgotten in discussions about climate change impacts.

Like a flower I droop in the heat. But staying cool with air conditioning or fans is expensive and takes a lot of energy. If you have a disability, there is only a 55.4 per cent chance you will be employed. Chances are you will not be in an air-conditioned building, which is dangerous during heat waves that are becoming more frequent and intense.

Most people with disability eat food (I say most because individuals with certain medical conditions rely on tube feed). With the rising cost of food, which is made worse by climate change, people on limited income are stretched. The poverty line for Nova Scotians is \$23,192.² If you are on social assistance with a disability, you will receive \$11,400 a year.³ If you have to pay for an apartment, phone, utilities and food, it will be tight. There is nothing for extras.

EDITOR'S NOTE

During the production of this issue, Jen Powley died at age 45. Her time working at EAC, from 2008-2013, included co-founding Our HRM Alliance and bringing the issue of complete communities into the conversation in Halifax. A livelong activist, Jen authored Just Jen: Thriving Through Multiple Sclerosis and Making a Home: Assisted Living in the Community for Young Disabled People, ran for council and collaborated with Zuppa on more than one of their artistic productions, among many other accomplishments. She brought her incisive sense of humour to almost every interaction and made a real impact on the world and the people around her. Jen had an indominable spirit and is missed by many.

My partner, Tom, is a type one diabetic. He uses orange juice to bring his blood sugar up, and he buys juice in aluminum cans. They are convenient and easy to open when his blood sugar is low, and I can hear him open them. For someone who is legally blind and a quadriplegic that is important. During the pandemic, getting juice in cans was difficult for a number of reasons. I was also shocked to learn that the rate of aluminum can recycling in California has dropped from 91 per cent in 2016 to 20 per cent in 2022.⁴ This is not great for the environment (producing primary aluminum, instead of recycled, uses a lot of resources and causes pollution) and it affects people like Tom.

The problem with disability and poverty might be improved with the passage of Bill C-22 in June 2023, legislation that creates Canada's first national disability benefit. As of August 2023, we don't know the details.

References

- 1. "About disability in Nova Scotia," Accessible Nova Scotia, August 16, 2023, accessible. novascotia.ca/about-disability-nova-scotia
- 2. Paul Schneidereit, "PAUL SCHNEIDEREIT: Even 'official' poverty out of reach in Nova Scotia," Saltwire, June 18, 2022, saltwire.com/atlantic-canada/opinion/paulschneidereit-even-official-poverty-out-of-reach-in-nova-scotia-100745002/
- 3. "Welfare in Canada Nova Scotia," Maytree, published 2022, maytree.com/welfare-incanada/nova-scotia/
- 4. Chetan Chaudhair, "Aluminum can shortage defines a new normal for food packaging," GEP Blogs, March 18, 2022, gep.com/blog/mind/aluminum-can-shortage-defines-anew-normal-for-food-packaging

Nova Scotia **Seniors Left** in the Cold

by MARNEY J. SIMMONS

As climate change makes weather events more extreme, the importance of reducing fossil fuel usage to a minimum becomes ever more urgent. One way to reduce our emissions is to adopt sustainable energy systems at home.

In an attempt to encourage Nova Scotia homeowners to use alternative, energy efficient methods to fossil fuels, the Government of Canada and the Province of Nova Scotia are working together to help low and median-income Canadian households make the transition to electric cold-climate heat pumps.

Nationally, the Oil to Heat Pump Affordability (OHPA) program provides up to \$5,000 to help eligible homeowners and may be While the rebates are enticing, qualification for them is highly combined with funding from existing federal and provincial specific, leaving them untenable for many. Specifically, low-income seniors who are renting their dwellings are put at a disadvantage programs including the Canada Greener Homes Grant and programs offered by Efficiency Nova Scotia. In addition to the by these government regulations. Many seniors are living in rebates for leaving behind oil, homeowners can receive support to cold environments and sacrificing food and medicine just to be upgrade their existing electrical panels. marginally warm.

The OHPA Grant includes electrical and mechanical upgrades Efficiency Nova Scotia recently launched an initiative to provide required for the new heat pump, safe removal and/or grants and rebates to senior apartment renters. However, the decommissioning of the oil tank, installation of a back-up electric program applies only to multi-unit dwellings. heating system (as required) and switching away from oil-using household systems, such as hot water heaters.

Although the programs are generous, there is a number of prerequisites for participation. Homeowners may be eligible for the OHPA Grant if their home is oil-heated as of January 2023 homeowners. (this must be demonstrated with copies of oil fuel bills 12 months preceding application), they are the primary residents and owners No one should have to suffer in the cold in Canada, and that of a single/ semi-detached home located in Nova Scotia and can includes low-income seniors who are already dealing with other provide proof of ownership, and their total household income is housing and financial difficulties. Governments need to level the at or below the maximum annual household income after-tax, as playing field by making energy savings available to everyone in determined by Statistics Canada (\$32,400 for one person). Canada - not just those that can afford to be homeowners.

> Marney (she/her) enjoys rural life on the North Shore gardening, sewing colourful and useful things for the home, visiting farmers' markets and walking the red sand beaches. Currently, she and a colleague are setting up a Rural Carpool transportation service on the North Shore in order to decrease fuel emissions and increase community connectedness.

Houses in Shelburne, N.S. PHOTO: Simon Ryder-Burbidge

A worker doing cleaning work on a heat pump. PHOTO: Aleksej Sarifulin/iStock

TAKE ACTION

Write letters and emails to your councillors, MLAs and MPs to ask for a more equitable distribution of green energy incentives, grants and rebates.

These federal and provincial government rebates for energy-saving measures are thus exclusionary. If seniors can afford their place of residence, qualifying for measures that contribute to climate change mitigation should be as convenient for them as it is for

Etujk Samqwan FOR THE WATER

by JOSEPH BROOKS

The view from the support vehicle. Contributed by Mawikuti'k Society

The Bay of Fundy Water Walkers in 2022. Contributed by Ducie Howe

High spirits on the Water Walk

Contributed by Ducie Howe

Samqwan (Water) is viewed as the most precious and sacred of our natural elements for the Indigenous people of Turtle Island and would be fairly viewed across humankind. In its natural ability to absorb both negative and positive energy, it can grant life and take into the life stream of our planet. A medicine and ability is bestowed to flow through women as the Water Carriers, and the blessing that brings new souls with us from the spirit world. These spirits or beings surround all of us and flow with the waterways.

Samqwan is in danger: its waterways have been stopped, withheld, and ruined by the contamination caused by the disposal and debris of mining acid water drainage and release of other chemicals justified by the federal government. The cleansing ability within this medicine is not to be taken for granted, like the abilities and knowledge of our Matriarchs. Those are the lessons of our kijus' (grandmothers) and other elders in our lives. Many days had passed that we have not drawn upon them for each communal decision we make.

We see that our waters feel the decomposition in the quality of our natural environment, which rises from a male-driven orientation woven into today's societies. Both the Indigenous and non-Indigenous people witnessed the damage caused by this dysplasia of their lands. It is like the views and images displayed in James Cameron's fictional story, Avatar. However, the urge for progressive economies of scale, and negative discourse about Indigenous peoples caused each wave of immigration to be blinded to the collective thought and governance they could offer. Instead, blissful in their ignorance, focused on individualized wants, they are led to take part in and continually aid in the occupancy, silent takeover, and denial of Indigenous Inherent rights and titles to these lands of Turtle Island (North America).

The Great Lakes of Ontario are deemed one of the worst polluted waterways in the world. Spiritual leader Eddie Benton Baa had the vision that water's economic value will be higher than gold by the year 2030. Grandmother Josephine Mandamin Baa was inspired and saw that it would be upon Indigenous Matriarchs who would stand for the lifeblood (samqwan) of our lands. They set the example and reminders upon their children and grandchildren for love, gratitude, and honouring of the water for future generations.

They also extend these teachings to all non-Indigenous people, as all grandmothers are required to teach their men to stand for all the beings within our natural environment. Over the past many Mi'kmaq and other Indigenous people have attempted to stand for their land, only to be slaughtered and hindered in their ability to properly steward these lands. In the recent 8 years, the Mi'ma'ki Waters Walkers have been committed to holding Water Walks within and outside of Nova Scotia.

Sharing teachings bestowed from Sister Josephine Baa, Carol "Ducie" Howe, Marian Nicholas, and Dorene Bernard, the Mi'kma'ki Water Walkers, continue to offer these teachings, as they had with Tara Lewis who had conducted the first Water Walk within the Unama'ki territory (Cape Breton). The Water Walkers urge people to not just make a physical, financial, and ceremonial effort for Samqwan and other natural medicines, but to stand with them participate, assist, or support their future ceremonies. against inappropriateness caused by governmental or privatized uses due to the marketplace's inflated order to induce hysterias amongst Mawikuti'k Society, Samqwan Pana Mimajuaqan, a Wela'liek. the public.

> Joseph "Joey" is a band member of Sipekne'katik First Nation, originally born in Boston. He is a founding member of the Mawikuti'k Society, which works in a selfgoverned way to promote Indigenization for community healing.



A copper vessel is used to carry the water Contributed by Ducie Howe

TAKE ACTION

You can donate to support the Mi'kma'ki Water Walkers and the Mawikuti'k Society by sending an e-transfer to MikmakiWW2022@gmail.com or mawikutik@gmail.com.

As we are coming into the era of the rainbow children prophecy, Indigenous people would be again sought for teaching and their understandings would be fostered by the new age of parenting to the youth of Turtle Island against hate and towards an openminded society that would not require our culture to be concealed anymore. Along with time, women will be strong in their roles as water carriers, and time will grow into identifying and holding a role to preserve all life, the waters and all sacred elements for our future generations. A person who respects protocols and is introduced to a Water Walker or Sundancer would benefit by properly presenting tobacco, and asking how they could

Lurking Beneath the Surface:

UNVEILING CANADA'S ENVIRONMENTAL RACISM

by **HELENA XU**

TAKE ACTION

Take part in change! Advocate for Bill C-226 and work to combat environmental racism. Join letter-writing campaigns, amplify and learn from marginalized voices, stay informed and engage with officials. Together we can build a just, equitable and sustainable future!

In a land of natural beauty, Canada is home to the longest coastline in the world, vast mountains and boreal forests. But lurking beneath the surface lies a troubling reality known as environmental racism. It is defined by Encyclopedia Canada as "the disproportionate proximity and greater exposure of Indigenous, Black and other racialized communities to polluting industries and environmentally hazardous activities." Beyond impacting these marginalized communities simply by creating physical pollution and engaging in destructive activities, environmental racism is further characterized by a history of exclusion of BIPOC (Black, Indigenous, People of Colour) perspectives from environmental policymaking.

Environmental racism often involves the targeting of marginalized and BIPOC communities with harmful environmental practices supported by unfair policies and environmental regulations. For example, in Nova Scotia, BIPOC communities including Mi'kmaq and African Nova Scotians are affected by this unjust practice. As a result, not only do they need to fight for the preservation of their land, but for the culture and connection that the natural environment offers to them. The Pictou Landing First Nation, a Mi'kmaq band located in Pictou Landing, N.S., provides a good example of this history. It spent the last 50+ years battling against the discharge of untreated effluent from operations of Paper Excellence's Northern Pulp Mill, which was only shut down by the provincial government in 2020. Once a fertile hunting and fishing ground, the land and waterways surrounding the pulp mill degraded into a toxic wasteland, leading the First Nations community to cease activities such as fishing, clam digging and hunting, perhaps for generations to come. In an interview with the CBC News Network, Francis-Denny, a member of the Boat Harbor Remediation Project recounts stories of the elders, "Of the white rock that people used to swim to, of being able to hunt and fish and bring home food, to be healthy and live off the land. And of the moment that was taken away ... the devastation." She says, "when you look at the elders and they talk about that devastation, you can feel the hurt, their pain." Considering the long lasting and generational impacts, Francis-Denny reflects, "would our suicide rates be so high? Our drug and alcoholism rates? We were deprived of a chance to live in a healthy environment. We've adapted to just surviving."

Another example in Nova Scotia is that of the Shelburne Dump, located in a predominantly black community, and only closed in 2016. A site for the storing and handling of contaminated garbage from industrial to medical waste, the Shelburne Dump was often lit ablaze. Louise Delisle grew up and lived only a kilometer away from the dump. Not only have members of her family succumbed to cancer-related deaths, but she, like many others, carries deep psychological wounds from living in that environment. She states, "It's not only about health and stress. It's also about lack of power, that you've placed certain industries in certain communities without consulting with them. You've taken away their power, you've taken away their voice, and you've placed it (a toxic dump) in communities that are not only racialized but that are also poor".

OTO:

Various political, structural and regulatory elements facilitate these kinds of environmental racism. Lack of economic and political power, as well as non-inclusion on regulatory and political bodies, lead to BIPOC communities being unfairly impacted by toxic environmental practices and industries. Lax zoning regulations and the granting of variances to accommodate polluting companies in BIPOC communities are another. Other kinds of regulations also discriminate against BIPOC communities. For example, in British Columbia, David Boyd, U.N. special rapporteur on environment and human rights noted that maximum penalties for dumping garbage or waste on crown land ranged from \$2,000 to \$1,000,000 whereas the maximum penalty for dumping on Indigenous reserves was only \$100.

However, hope is emerging for addressing environmental racism in Canada as more communities begin to identify the historical roots of this issue. Beyond community-specific actions such as shutting down the Shelburne Dump, sustainable development plans are slowly being created and implemented. Encouragement and resources for such transitions are emerging from many places, including from the United Nations 2030 Agenda's Sustainable Development Goals. This document describes a multitude of strategic actions for the creation of healthy, sustainable communities including those for marginalized and BIPOC communities.

Additionally, a number of Canadian provinces have now established an Environmental Bill of Rights. The province of Nova Scotia is the first, and so far, the only one to have given first and second reading to a bill specifically addressing environmental racism, "The Environmental Racism Prevention Act" (Bill 111), although as of August 2023 it has not yet been passed. The federal government is also taking steps to confront this country's history of environmental

References

"A Community of Widows': How African-Nova Scotians Are Confronting a History of Environmental Racism | CBC Radio." CBC News, April 4, 2018. cbc.ca/radio/thecurrent/ features/facing-race/a-community-of-widows-how-african-nova-scotians-are-confronting a-history-of-environmental-racism-1.4497952

WALDRON Ingrid, "Environmental Racism in Canada", the Canadian Commission for UNESCO's IdeaLab, Ottawa, Canada, July 2020.

"For 50+ Years, Pulp Mill Waste Has Contaminated Pictou Landing First Nation's Land in Nova Scotia." CBC News. cbc.ca/cbcdocspov/features/for-50-years-pulp-mill-waste-hascontaminated-pictou-landing-first-nations

Rudder, Denée, Lidia Abraha, Ayesha Ghaffar, and Nicole Emanuel. "Living in the Shadow of Chemical Valley." The Resolve, April 4, 2023. theresolve.ca/living-in-the-shadow-of-chemical-valley

Paper Excellence's Northern Pulp Mill, which was shut down by the provincial government in 2020. PHOTO: Gerry Ferrel



racism. Bill C-226, defined as "an Act respecting the development of a national strategy to assess, prevent and address environmental racism and to advance environmental justice" illustrates this effort. Considering many aspects of the problem, including "the link between race, socio-economic status and environmental risk" as well as "the involvement of community groups in environmental policymaking", Bill C-226 will not eradicate environmental racism in its entirety but is a step in the right direction. The bill was given first reading in the House of Commons in early 2022 and is currently proceeding to the Senate. From across the country, members of parliament are hearing from their constituents that environmental racism is a problem for which we as a country must take responsibility and bring to an end.

Each of us can also contribute to this process. Several civil society and environmental groups have been hard at work, urging the Senate to quickly address Bill C-226. We can assist by joining letter writing campaigns such as those hosted by KAIROS, a Canadian inter-church justice coalition, and the Canadian Coalition for Environmental and Climate Justice. In Nova Scotia everyone should advocate with their MLAs for the adoption of Bill 111. Above all, we can endeavor to amplify marginalized voices and to hold ourselves accountable for the upholding of environmental justice required to create an equitable and sustainable future for all.

Helena (she/her) is a writer and environment-enthusiast currently pursuing an undergrad in computer science. In her free time, she enjoys reading, hiking and wandering antique shops.

Worst Possible Air Quality, Worst Wildfire Season on Record

by LEIF GREGERSEN

Deforestation is one of the biggest drivers of climate change, next to the burning of fossil fuels. As forests grow, they capture huge amounts of carbon. But each year across the globe, 15 million hectares are deforested, while regrowth replaces only five million hectares for a net loss of 10 million hectares per year. When these forests are cleared, the carbon they store is released into the atmosphere as carbon dioxide and contributes to climate change.

Canada has seen firsthand the devastating effects of this process. Climate change is one of the biggest factors in our record-setting forest fire year, with dry, hot weather leading to more thunderstorms, high winds and lightning.

Lightning is the ignition source for half of all forest fires, and it is responsible for 85 per cent of total area burned. When lightning is combined with an abundance of fuel, dry conditions and high winds, strikes can set fire to more than just the forest surface, sometimes even causing fires to burn underground. This is called a holdover fire, which can keep burning after a wildfire is extinguished, even over the course of an entire winter.

In Canada, we have had double the average number of fires in 2023, and the problem is hitting Eastern Canada worse than ever. The month of May this year was one of the hottest globally on record. This has contributed to 10.9 million hectares of forest and grassland scorched by fires so far in 2023. Deforestation results in warmer temperatures, and warmer temperatures initiate the vicious cycle of more deforestation.

Forest fires and the masses of smoke they create are a terrifying aspect of our changing climate. But the ecosystems in which they occur can actually benefit from smaller, less frequent fires. Fires release valuable nutrients stored in debris on the forest floor and open the forest canopy to sunlight resulting in new growth. Smaller fires also allow some species of trees to reproduce by opening their cones, allowing seeds to reach the soil. Small forest fires can also prevent larger, more dangerous fires by burning up dead vegetation that would otherwise accumulate into fuel. But when fires happen with more frequency and intensity, as they are this year, they become harmful. Larger, more frequent fires make is harder for ecosystems to recover from intense scorching.

TAKE ACTION

Counter deforestation by reducing your paper use and recycling paper and wood products whenever possible, using recycled construction materials and being responsible with fires when camping or cooking outdoors. Further actions could include writing letters to politicians and editors of newspapers and magazines, as well as participating in public gatherings and demonstrations to urge leaders to take real climate action.

One of the immediate dangers of the 868 fires which have burned so far this year in Alberta, where I am based, and the 121 fires currently burning as I write this in August 2023, is air quality. According to data tracked by The World Air Quality Index, on May 21, 2023, Alberta recorded the worst air quality in the world. During times of poor air quality, officials recommend staying indoors with windows shut and wearing N95 masks to prevent particulate matter from entering the respiratory system, bloodstream and eyes of those who are in areas of intense smoke. Frequently in Alberta this year, the air quality index has been reported at level 10+, which is the worst possible level. The smoke has affected other parts of Turtle Island/ North America as well, with air traffic disrupted as far away as New York City due to forest fire smoke coming largely from Canada.

Among the hardest hit by the fires are people with disabilities, the elderly and those experiencing homelessness. Children may also experience coughing, bronchitis and other symptoms due to inhaling smoke. People with disabilities, whose poverty rate is 14.4 per cent in Canada, and the elderly, whose poverty rate is **6.7 per cent**, are less able to afford air conditioning, which makes staying indoors with windows shut in record-breaking heat next to impossible. These populations are also more likely to have existing respiratory conditions, making poor air quality extremely dangerous to them. People experiencing homelessness often have nowhere to go when the air quality reaches dangerous levels and often can't afford PPE like N95 masks.



It is also believed that for those in affected areas, the cumulative One of the unfortunate realities of losing a home to wildfires is that stress of poor air quality, the possibility of needing to be evacuated, many rural homeowners don't have adequate fire insurance. Rates experiencing hot weather with windows shut and not being able to for communities without close access to a fire department can be go outside as frequently, along with the risk of losing everything extremely high and many people in remote communities simply to wildfires and having to leave animals and pets behind, can have can't afford coverage. Even with insurance, there are things that can never be replaced. All too often, evacuees are unable to bring extreme effects on a person's mental health. People with mental health disabilities - who are also at risk for higher rates of poverty precious memories such as photo albums with them and there are many cases of people who just don't have the time or ability during and isolation – are also more likely to be **smokers**. It is estimated in Canada that half of all smokers have a mental health or substance an evacuation order to bring all their pets. use disorder. Using e-cigarettes or tobacco may exacerbate the effects of poor air quality on the respiratory system, further compounding Currently (August 2023), 1,600 firefighters from Alberta and a further the effects of forest fires on these populations. 900 members of the Canadian Armed Forces are fighting wildfires in

The Alberta government has some efforts in place to support the needs of evacuees. Those who have had to leave their primary homes for seven days or more and don't have secondary residences are eligible for an evacuation benefit of \$1,250 per adult and \$500 per dependent child under 18. There are also provisions made for those who may need special accommodation in the form of social assistance payments. For many, this is a tiny fraction of what they have lost to fires. Fortunately, some jurisdictions have set up disaster relief funds and the Red Cross also helps those most affected.

Alberta. The provincial government has recruited firefighters from all over the world to join the fight, more than 2,000 of them coming from as far away as Portugal, Chile, New Zealand and Australia. In recent weeks, Alberta has fortunately experienced its fair share of rain, but this year will nonetheless easily turn out to be the worst forest fire season on record. The fear among climate scientists is that wildfires will only grow worse as the global temperatures increase.

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LEARN MORE AT ecologyaction.ca/sustainabilityallies



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Decolonizing **Climate Justice**

UNCED

by **SIAN BORDEN**

Mi'kmag land defenders and their allies march in support of the Wet'suwet'en and their fight to stop a pipeline being forced through their traditional and unceded territory.

Climate justice recognizes that climate change affects people and places differently based on a multitude of factors such as race and class. People who historically benefitted from colonialism are more likely to be better equipped to deal with its effects. This is why climate change adaptation and mitigation strategies should be grounded in equity and why decolonial climate justice is crucial in our fight for a better future.

Upholding the foundations of society often takes precedence over justice and morality. Exponential growth on a finite planet is impossible and yet, it is a key component in the principles of modern capitalism. The consequences are being felt right now: our land is burning, and our ocean is boiling.

Kathryn Yusoff's A Billion Black Anthropocenes or None centers the experiences of Black, Indigenous, and other marginalized groups in the field of geography. While each community's experience is unique, the common denominator is otherness. Colonial powers continually overexploited distant lands and waters guided by domination, greed and homogeneity. It is important to note that the origin of this violence in North America is European, but that conquest exists globally. Regardless of where they are in the world, marginalized communities are treated as disposable and inhuman because they do not adhere to the homogenous ideology of the colonizer.

Ingrid Waldron's There's Something in The Water and its subsequent documentary provide an example of otherness, showing environmental racism that African Nova Scotians and Mi'kmaq experience as a result of colonialism. Waldron's work displays how land stewards know their environments best, but unfortunately, their place-based knowledge is often disregarded when it comes to policy-making and environmental management.

Leah Thomas' The Intersectional Environmentalist provides case studies for how marginalized communities worldwide are disproportionately affected by the climate crisis. The book delves deeply into the intersectionality of environment and identity and provides a wealth of resources for those seeking to further their knowledge of environmental justice.

Decolonization questions the root of beliefs and actions in a colonialist system. It is a constant choice and can be challenging as it requires introspection and radical honesty regarding internalized practices such as racism, misogyny and homophobia. It requires a fight against the status quo, which can be difficult, isolating and often terrifying. It is a life-long journey that requires selfforgiveness, open-mindedness and community, and should not be done in a silo. According to Malcolm Ferdinand's Decolonial Ecology, climate justice requires us to confront capitalism and colonialism in pursuit of environmental restoration. It includes a reframing of worldviews. Robin Wall Kimmerer's Braiding Sweetgrass is another excellent book that can assist with the reshaping of perspective as it prioritizes values such as respect and reciprocity.

Compassion is crucial. It's important to reflect on the consequences of colonialism that persist to this day across the globe. Certain countries and communities may have inequitable access to infrastructure and, due to the effects of colonialism, they must prioritize other concerns before the environment. Collective action is needed to honour people and the planet, and we need to make space for all communities to take part.

Protest signs at a march in support of the Wet'suwet'en and their fight to stop a pipeline being forced through their traditional and unceded territory

TAKE ACTION

Support climate activists from diverse backgrounds. Listen to the problems that their communities are facing and let them speak first.

Be aware of how you are taking up space, especially as a guest in another community.

Acknowledge that the impact of colonialism and capitalism is integral to understanding climate justice. Pursue further knowledge on decolonizing climate justice.

References

Ferdinand, Malcolm, Decolonial Ecology: Thinking from the Caribbean World. Polity, 2022.

Kimmerer, Robin Wall. Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants. Milkweed Editions, 2015.

Thomas, Leah. The Intersectional Environmentalist: How to Dismantle Systems of Oppression to Protect People + Planet. Voracious, 2022.

Waldron, Ingrid R.G. There's Something in The Water: Environmental Racism in Indigenous & Black Communities. Fernwood Publishing, 2018.

Yusoff, Kathryn. A Billion Black Anthropocenes or None. The University of Minnesota Press, 2018

Sian (she/her) is a graduate student at the School for Resource & Environmental Studies at Dalhousie University. She loves to read, spend time with loved ones and explore the land and waters around her.

Sandy Lake in fall 2022. PHOTO: Simon Ryder-Burbidge

Through Fires and Floods: HOW HOUSING SOLUTIONS **ARE CLIMATE SOLUTIONS**

by HOPE MOON

When the June wildfires raged through Nova Scotia, shortly followed by the July floods, both destroying communities and homes in their wake, the connection between the housing crisis and the climate crisis became undeniable. As people lost their homes, many wondered, "Where will they go?"

With historically low vacancy rates and even fewer affordable options, Nova Scotians are keenly aware of the province's housing crisis. Even once secured into a home, staying on top of growing and volatile expenses associated with heating and cooling is difficult. People are living precariously and have been made increasingly vulnerable to system-shocking events like natural disasters.

The climate crisis exposes weaknesses in our systems and tests the ability of communities to recover from devastating events. After the fires and floods, the number of people living in precarious housing situations has only increased. The one relief is that both crises can and should be addressed simultaneously.

Less housing, lower resilience

Anyone with experience looking for a place to live will tell you that it's not only difficult to find a vacancy, but also increasingly expensive.

Nova Scotia's vacancy rates are historically low, with Halifax's rate at one per cent — below the Canadian average of 1.9 per cent. A recent report by the Canadian Centre for Policy Alternatives discovered that the rental wage in Nova Scotia, which is the hourly wage required to rent a one- or two-bedroom apartment, stands at \$21.38 and \$26.06, respectively. At the time of the report, minimum wage was \$13.60 per hour (currently it is \$14.50 per hour). Though the minimum wage is expected to increase to \$15 per hour in October, it is not nearly close enough to the rental wage in order for Nova Scotians to be secure in their housing.

Even those in secure housing will tell you that bills have gone up, too. The cost of home heating oil was 50 per cent higher in 2022 than it was in 2021, and the cost of electricity is set to rise by 14 per cent by the end of 2024. Altogether, low availability and affordability and high energy costs are tipping many households into financial insecurity across the province.

When people are forced to choose between rent, heating, food or medication, there is little wiggle room to deal with unpredictable costs or crises. Mental capacity to focus on anything beyond immediate needs or concerns becomes limited. This lowered capacity to think about the future or donate time and energy to a cause disengages people from collective, long-term climate action and adaptation plans. The housing crisis renders people vulnerable and stagnant when what we need is resilient and active communities.

Resilient communities are able to rise again after being knocked down. Nova Scotians have shown incredible resilience and strength in the past few years. However, with our warming climate, our communities are being knocked down more and more, with less and less time for recovery before the next blow. In the ten months between September 2022 and July 2023, we have dealt with a hurricane, devastating forest fires and unprecedented flooding, on top of a worsening housing crisis and rising inflation. With future heat waves, storms and other extreme weather, investment in secure, affordable and efficient housing will help us stand tall and lead us to the biggest solution – lowering our overall emissions.

Housing solutions are energy solutions

In 2019, residential energy use made up a quarter of the province's energy demand, with two thirds coming from home heating oil alone. Programs and policies aiding the transition from oil- and gas-based heating systems towards electric heat pumps directly decarbonize home heating methods. Additionally, an efficiently built or retrofitted home can retain temperatures better, reducing excessive energy spent on heating or cooling — saving energy and costs.

The province has begun addressing energy use and affordability, offering free heat pumps for low-income households and accelerating the transition from oil heat. Coupled with their climate plan goal of "[banning] installations of oil-fired heating equipment in new buildings by 2025," both new builds and existing households have the chance to decarbonize their heating sources. However, these programs are only available to those fortunate enough to own their own homes, leaving renters, students and apartment complex residents without many options to lower their costs and environmental footprint.

While the Nova Scotian 2022 Climate Plan lays out priorities to "support the construction and renovation of net-zero homes and multi-unit residential buildings, including net-zero affordable housing," it lacks any concrete detail of what that support will look like - how many homes and buildings will they support? How much housing will be made affordable? The province has a history of supporting private housing developments under the guise of tackling the housing crisis, but these developments are environmentally destructive and ineffective. An example is the Sandy Lake-Sackville River development being sped up by the province along with nine other developments. This project would be ecologically destructive, probably unaffordable and is estimated to only add cars on the road and spread communities even more thinly between vital resources. With plans like this, the province's climate plan rings hollow.

The case of Sandy Lake-Sackville River tells an important cautionary tale: attempting to solve one crisis by accelerating another is unsustainable and impractical.

Buildinas in downtown Halifax PHOTO: Simon Ryder-Burbidae

TAKE ACTION

Send a message about the Sandy Lake-Sackville River planned development to the provincial authorities who made this decision AND who have the power to reverse it: ecologyaction.ca/SaveSandyLake.

Get involved and support your local affordable housing organization, the Nova Scotia chapter of ACORN: acorncanada.org/ locations/nova-scotia-acorn/.

Moving forward

We are living through a poly-crisis. Climate change and the housing market are competing to make our world inhospitable. Without mitigation, these crises have only grown stronger and more wide-reaching. While we have overcome challenges in the past, our communities are struggling through the effects of these compounded crises.

Like most good solutions, there is no one silver bullet but a combination of strategies that will move us forward. Investments in affordable, net-zero housing through retrofit policies, grants and development regulations will naturally build strong and resilient communities that cannot only withstand climate disasters like this summer's fires and floods, but actively work together to prevent them.

With the wealth of solutions available for addressing both housing and climate, the question is: what are we waiting for?

Hope (she/her) works to organize and empower people to take local climate action. She also loves to cook, go on hikes and catch up on the latest celebrity gossip.

Diasporic Communities, Indigenous **Sovereignty** and Allyship

by **DIVYA THOMAS**

Colonization across the globe

The Doctrine of Discovery is a philosophical and legal concept that Europeans used for centuries to justify dispossessing non-Christians from their lands during colonization.

This concept was instrumental in the colonization of Indigenous Peoples of Turtle Island. However, many forget that this same colonial tool was used to colonize many parts of South Asia and Sub-Saharan Africa.

In 1947, India and Pakistan gained independence from 300 years of colonial rule and underwent partition. Partition led to the largest mass migration in human history, with millions of people dying during the conflicts that followed. The legacy of partition is an incredibly painful part of South Asia's history, which continues to shape its current realities. South Asians have different perspectives and lived experiences of colonization and its consequences. However, most can agree that British colonial rule distorted South Asia's trajectory, delaying its development and stability today.

Divya (she/her) holds a BA (hons) in Political Science and Sustainability, and a Master of Public Administration. She loves writing stories and poetry that explore identity and diasporic experiences. In her spare time, she loves playing soccer and walking her puppy, Shanti.



Champaka Srinivasan (my grandmother) wedding photo captured in Mysuru, India. Photographer Unknown. Taken in 1971.

The South Asian diaspora in Canada

Throughout my childhood, my paati (grandmother) shared her experiences of partition and India's independence from British colonial rule. She shared how colonization diminished Indian women's voices and increased violence against them. She also shared her inner conflict when she came to Canada and had to pledge allegiance to the British Crown for her Canadian citizenship: the same Crown India had just become independent from.

When my grandparents landed in Canada, they experienced systemic racism and anti-Asian hate stemming from the 1885 to 1923 Chinese Head Tax and the 1951 quota-system for South Asian immigration. In this time of ignorance, my grandparents were often mistaken for Indigenous people and were called anti-Indigenous racial slurs. This experience highlighted the connections between our family's experience of colonization and the colonization actively happening here.

Step out of your comfort zone and educate yourself about Indigenous culture and history. Read the Truth and Reconciliation Commission Report and the 94 Calls to Action.

LISTEN

Actively listen and believe Indigenous Peoples when they share their lived experiences. Take part in a Blanket Exercise.

TAKE ACTION

Donate/Volunteer at Indigenous organizations (wijewinen.ca). Shop from Indigenous owned businesses. Take part in a peaceful protest or demonstration. Support Indigenous rights through public policy.

References

Bartlett, C., Marshall, M., & Marshall, A. (2007). Integrative science: Enabling concepts within a journey guided by Trees Holding Hands and Two-Eyed Seeing. Retrieved June 30, 2009, from integrativescience.ca

South Asian solidarity with Indigenous communities

Mi'kmaw Elder Albert Marshall coined the concept of Two-Eved Seeing: "learning to see from one eye with the strengths of Indigenous ways of knowing and from the other eye with the strengths of Western ways of knowing and to using both of these eyes together." When I learned about this concept, I felt connected to it. Diasporic communities often feel that they live 'in between', with both a Western and Eastern way of seeing the world. Two-Eyed seeing intentionally and respectfully brings together our different ways of knowing.

The experiences of diasporic communities, including those from South Asia, cannot be equated to those of Indigenous Peoples on Turtle Island. However, members of the South Asian diaspora have an embodied knowledge of colonialism that overlaps in some ways with Indigenous experiences of colonization.

I believe this shared experience of colonization uniquely positions us to become active allies to Indigenous Peoples on Turtle Island and be champions of reconciliation. While many of us in the South Asian Diaspora come from countries that are now independent from colonial rule, we must understand that we will never be free from colonialism while Indigenous Peoples remain unfree. Given our lived experiences of colonization, I believe we have a responsibility to support Indigenous sovereignty, by actively learning and using our embodied knowledge.

Climate activists protest the Energy Charter Treaty in north London, U.K. PHOTOS: Global Justice Now

Energy Charter Treaty Stifles Climate Action

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JUSTICE TO RANSOM

CLIMATE

by CHARLOTTE ELTON

What would you do with US\$190 million?

You could use the eye-watering sum to build around 500 community solar farms, or up to 120 wind turbines. With the flick of a pen, you could rehouse millions of people dispossessed by Pakistan's 2022 floods, or commission rewilding charities to reforest thousands of acres of depleted land.

Alternatively, you could give the money to a fossil fuel company.

In 2022, the Italian government was ordered to pay U.K. oil and gas corporation Rockhopper US\$190 million for blocking a planned Adriatic Coast project. The lawsuit is just one among dozens of cases being brought by fossil fuel giants against governments enacting climate legislation.

Charlotte is a journalist based in London. She has written for In These Times, The Big Issue and Euronews.

Under the Energy Charter Treaty (ECT) - an investment agreement among more than 50 countries - corporations may pursue legal action against government policies with the potential to damage company revenue.

The treaty draws on older agreements from the 1950s, when countries across Africa, South America and Asia decolonized. Newly independent states tried to nationalize their resources, threatening the profit margins of foreign companies. Over the ensuing decades a new legal principle was institutionalized, allowing corporations to sue governments threatening their revenue.

In the 1990s the ECT formalized this standard. It's been incrementally expanded - and now goes way beyond protecting existing investments, warns Nick Dearden, director of Londonbased campaigning organization Global Justice Now.

"Under the treaty, a 'threat' to [a company's] interests does not simply mean the government coming in and taking over an oil well, for example," he says.

"This ECT allows corporations to challenge any adverse impacts from regulatory change."

This standard – which includes potential damage to future profits "Sunset clauses" built into the treaty make it difficult for countries - has major implications for climate action. Phasing out coal, for to simply withdraw from the ECT, as claims are valid for up to two decades. Italy left the ECT in 2014; yet it was ordered to pay example, will impact the profits of coal investors. Under the ECT those investors can sue - and they have. In 2021, for example, Rockhopper in 2022. German energy companies RWE and Uniper filed lawsuits to seek billions of dollars in compensation for the Dutch government's But outrage is growing. 2018 decision to shut all coal-fired plants by 2030.

In July, the European Union (EU) announced plans to leave the In all, 158 ECT signatories have faced lawsuits since 2001. As treaty, ending attempts to modernize it. Though countries like governments enact climate law, the number of cases could skyrocket. Japan and Switzerland will remain in the ECT, this mass exodus According to OpenEXP - a Paris-based network of sustainability will prevent companies based in EU member countries from suing experts - the final cost in ECT compensation could exceed US\$1.3 other EU member countries. The exodus will defang the treaty trillion. significantly.

Worse still, the treaty encourages oil and gas exploration, Dearden warns.

"The ECT incentivizes investment into fossil fuel exploration and production because it basically says if governments try and regulate the sector, don't worry, you can probably make as much money by suing them," he explains.

PAR



- To mitigate the most catastrophic effects of climate change, we must rapidly decarbonize. The ECT is just one example of the secretive corporate courts that threaten this vital progress.
- "I'm reasonably optimistic that [the EU departure] could be a death knell for the treaty as a whole," Dearden says.

"But that doesn't mean we can just sit back ... There is a long, long way to go in terms of rolling back this system, globally."



In India, Women's Seed **Conservation Practices Are Making Them Climate Resilient**

by **SOHEL SARKAR**

Tamarai is unsure of her age but she can name every single one of the 30-odd varieties of heirloom millet seeds she's saved over the years. She started nearly three decades ago, when she took charge of the family's two-acre farm following the death of her husband. She utilized a practice she learned from her mother and aunt who would always grow a few varieties of millets, pulses and vegetables in their backyard, regardless of the crops being cultivated in the commercial fields by the men. After every harvest, they would carefully select and preserve the healthiest seeds, and exchange some with the rest of the community. "For every seed they saved for the family's use, two were given away", Tamarai explains.

For generations, women in India's agrarian and indigenous communities have saved heirloom seeds as a de facto form of biodiversity conservation, safeguarding heritage crops from extinction.¹ In turn, the easy availability of diverse seeds enabled them to grow a variety of food crops and claim nutritional security for their families. In recent years, their seed saving practice is also making them climate resilient.²

Millets, in particular, can grow in poor quality soil with very little water and care.³ They also grow best in a polyculture system, combined with nitrogen-fixing pulses and oilseeds.⁴ Historically, these qualities made millets a staple crop, especially in the drier parts of the country.

However, millets began to disappear from farmers' fields following the Green Revolution of the 1960s and '70s, when the Indian government incentivized farmers to switch indigenous seeds for high yielding varieties of rice and wheat.⁵ It was only in the late 2010s that policymakers realized that heirloom millets held huge potential in a climate insecure world: being drought resistant and heat tolerant, they could grow well amid higher temperatures and poor rainfall.

During a devastating drought that struck Dharmapuri district between 2016 and 2018,⁶ as the rains continually failed, millets were one of the few crops that survived, allowing women to put food on the table, Tamarai says.

Such climate uncertainties set in motion a movement to revive millet cultivation across India, and this is when heirloom seeds saved by women came in handy for farming communities. Tamarai is part of the Tamil Nadu Women's Collective which helps small and marginal women farmers practice sustainable farming and reclaim nutritional security for themselves and their families. When the collective started in 2013, it was women like Tamarai who supplied the seeds they had been saving for years, teaching newer members how to conserve them.

types of seeds. Many save anything between five to thirty varieties depending on the size of the land they have, and the different types of crops they grow," says the collective's founder Sheelu Francis.⁷

These women are following in the footsteps of many generations of seed mothers, women who have historically been responsible for identifying, collecting, multiplying, conserving heirloom seeds, and encouraging community farmers to use them. While the tradition is dying out in some regions, seed mothers are still an integral part of agrarian and indigenous communities in certain states like Tamil Nadu, Karnataka and Odisha.⁸

Some of these communities have seed conservation and exchange as part of their rituals. The indigenous Kutia-Kondh people of Odisha's Kandhamal district, for instance, celebrate a post-harvest seed festival called Burlang Yatra. Burlang is defined as a bamboo basket used to store seeds. The festival is an occasion for farmers to display and exchange heirloom seeds as well as share the knowledge of how to conserve and grow them with others in the community. Honoring their role as traditional custodians, it is women who carry the heirloom seeds in brightly painted clay pots to the host farmer's house in the same or a nearby village. The exchange of seeds takes place only between women farmers, and the ceremony is presided over by a woman priest.

These knowledge systems are now being restored by agri-based grassroots nonprofits and farmer producer organizations across India. The Tamil Nadu Women's Collective organizes annual seed festivals to facilitate exchange between members and women farmers elsewhere in India. While the collective depends on decentralized seed saving by members, the Andhra Pradesh-based nonprofit Sanjeevani has a seed bank that collects seeds freely shared by farmers and distributes them among other participating farmers.

"Preserving indigenous seeds has been a way of life for our elders," Tamarai points out. "We are only taking it forward."

> Sohel (she/her) is an India-based independent journalist, writer and editor with bylines in Whetstone Magazine, Sourced Journeys, Eaten Magazine and Feminist Food Journal, among others. She works on the areas of food and sustainability, gender and culture.



crops displayed during a seed exchange festival.

TAKE ACTION

Saving seeds is a great way to conserve agrobiodiversity and safeguard plants against extinction. Beginners can start by saving seeds of crops such as tomatoes, lettuce and beans. These are annual, self-pollinating crops that require little to no isolation, and only a few plants are needed to reliably produce seeds.

References

- 1. Dixita Deka, Joel Rodrigues, Dolly Kikon, Bengt G. Karlsson, Meenal Tula, and Sanjay Barbora, Seeds and Food Sovereignty: Eastern Himalayan Experiences (North Eastern Social Research Centre, 2023), 1-21.
- 2. Kaitlyn Duthie-Kannikkatt, Shailesh Shukla, Sanyasi Rao M.L., Kiran Sakkhari, and Devullu Pachari, "Sowing the Seeds of Resilience: A Case Study of Community-based Indigenous Seed Conservation from Andhra Pradesh, India", Local Environment, (August 2019), 24:9, 843-860, DOI: 10.1080/13549839.2019.1652800.
- 3. Hiren Kumar Bose, "Farmers Turn to Millets as a Climate-smart Crop", The Third Pole, September, 17, 2018, thethirdpole.net/en/climate/farmers-turn-to-millets-as-a-climate smart-crop/
- 4. Kaiyan Guo, Jun Yang, Nan Yu, Li Luo, and Ertao Wang, "Biological Nitrogen Fixation in Cereal Crops: Progress, Strategies, and Perspectives". Plant Comm. 4, (November 2022), doi.org/10.1016/j.xplc.2022.100499.
- 5. Daisy A. John and Giridhara R. Babu, "Lessons From the Aftermaths of Green Revolution on Food System and Health". Frontiers in Sustainable Food Systems, (February 2021), Volume 5, doi.org/10.3389/fsufs.2021.644559.
- 6. Karthikeyan Hemalatha, "Dharmapuri has Forgotten the Many Names for Rain". Village Square, April 30, 2018, villagesquare.in/dharmapuri-has-forgotten-the-many-namesfor-rain/
- 7. Lopamudra Patnaik Saxena, "Community Self-Organisation from a Social-Ecological Perspective: 'Burlang Yatra' and Revival of Millets in Odisha (India)". Sustainability, (March 2020); 12(5):1867. doi.org/10.3390/su12051867.
- 8. Kaitlyn Duthie-Kannikkatt, Shailesh Shukla, Sanyasi Rao M.L., Kiran Sakkhari, and Devullu Pachari, "Sowing the Seeds of Resilience: A Case Study of Community-based Indigenous Seed Conservation from Andhra Pradesh, India", Local Environment, (August 2019), 24:9, 843-860, DOI: 10.1080/13549839.2019.1652800

Action is Our Middle Name

WILDERNESS

We celebrated a major victory in defense of all of Nova Scotia's Parks and Protected Areas when the government finally announced it would not allow a proposed private golf course to be built on West Mabou Beach Provincial Park. We played a leading role in defending the park, coordinating a successful provincewide campaign alongside local champions and citizens across N.S. Government received thousands of letters and got the message loud and clear: "Hands off our Parks and Protected Area; they are not for private developers!"

In HRM, we continued to work alongside the Sandy Lake Conservation Association to advocate against the N.S. government's fast-track planning for housing development that would harm Sandy Lake and Sackville River. Karen McKendry led a series of very successful public hikes in the area.

In August, we hosted N.S.'s first annual Wetland Appreciation Week, in partnership with groups and organizations across the province. The week included guided hikes, webinars, interactive activities and more.

TRANSPORTATION

In June, the team rolled out our How-To Guide for Creating Community Bike Repair Spaces. The guidebook addresses a growing need for inclusive, community-based spaces that provide Nova Scotians with access to active transportation tools, resources and education.

Our own mobile bike repair spaces had a spectacular season, with the Pop-Up Bike Hub (PUBH) repairing over 300 bikes in 17 communities across N.S. The PUBH Mini has had a great season partnering with the Wonder'neath Art Bikers, a mobile bicycle art program providing free artmaking opportunities. The Mini helped to get over 80 bikes safely rolling across five HRM communities.

The Welcoming Wheels Earn-A-Bike and Bike Buddy programs had a great season, with 47 participants across both programs. We continue to support and facilitate community active transportation initiatives across the N.S. for all ages and abilities. Hats off to our summer staff who worked hard to get bikes safely rolling in N.S.!

MARINE

The Kelp Kurious project harvested a bountiful crop of sugar kelp from Indian Point Marine Farms in Mahone Bay this season. Kelp Fest 2023 was a success with 180 people attending events, 10 restaurants featuring EAC's kelp on the menu and 17 other businesses developing sample kelp products. We also released a seaweed market roadmap for Nova Scotia and a post-harvest handling guide.

We're working alongside a century-old swordfish harpoon fishing fleet to help adapt this small-scale, sustainable fishery to changing ocean conditions and declining harpoon catches. Now in its second year, the trial got off to a great start in July with EAC's fisheries scientist on board.

Our eelgrass program hosted several workshops this summer to train more than a dozen watershed groups in eelgrass mapping, monitoring and restoration methodologies – early steps towards a regional eelgrass research and conservation network.

FOOD

We've been working diligently to prepare Part B of the JustFOOD Action Plan, which will include implementation strategies and budget proposals for priority recommendations. To inform this work, we launched three new working groups: an (1) African Nova Scotian and Black Food Sovereignty and Justice Working Group; an (2) Indigenous Food Sovereignty and Justice Working Group; and a (3) Municipal Working Group, which brings together more than 20 municipal staff members from across business units.

We continue to work with community partners to improve regional food access and strengthen our food system. We have been collaborating with Feed Nova Scotia to progress a rural food delivery pilot program and are working with a range of partners to support food distribution during times of emergency. We also continue to develop an interactive HRM Food Asset Map, which will be launched publicly in 2024.

COASTAL & WATER

In March 2023, Nova Scotia Environment & Climate Change Minister Tim Halman announced an indefinite delay of the Coastal Protection Act (CPA) regulations, and in August, released a statement that the province would not commit to implementing the Act before July 2025. Recently, we have been outspoken in the media regarding our disappointment and working closely with municipal councils and coastal property owners across the province, which we will continue until the regulations are released. We held a Virtual Town Hall for coastal communities to learn and discuss implications of the CPA in August. We're providing policy recommendations for municipalities to develop their own coastal development regulations in the meantime and contacting councils to sign onto a joint statement calling on the province to implement the Act immediately. We also have a successful ongoing letter campaign for the public to contact Minister Halman, Premier Houston and their MLA calling for the release of the regulations.

ENERGY & CLIMATE

We mobilized citizens supporting the federal Clean Electricity Regulation. We've presented letters to the Minister of Environment and Climate Change, organized MP meetings and are contributing to a fall consultation process.

We've commissioned East Coast Environmental Law to explore how offshore wind is assessed and regulated in Germany, U.K., Northern Ireland and the U.S., and submitted comments to the province on the Offshore Wind Development Roadmap.

We've worked with volunteers to pilot an Energy Transition Deep Canvassing Project in Eastern Passage and Stellarton. After attending the Pictou County Climate Summit in June and speaking with residents, we've started door-to-door canvassing with plans to expand efforts.

We submitted comments on the Zero Emissions Vehicle Mandate to ensure reduced wait times for EVs in Atlantic Canada. We published our report "Ensuring Electric Vehicle Adoption in Nova Scotia." We hosted on electric school bus (ESB) showcase, laying groundwork for an ESB pilot in HRM.

We continued our home energy efficiency workshops in Mi'kmaw communities, participated at the First Nations general assembly and Bright Futures Camp in Millbrook, and hosted an inter-spiritual roundtable on climate.

BUILT ENVIRONMENT

With the recent extreme weather events in Nova Scotia, we're more motivated than ever to ensure Halifax is growing in a sustainable and resilient way. This summer, HRM released its draft Regional Plan for public consultation; the vision for how and where the city will grow to one million people. We led EAC's analysis and review of this draft document and submitted our feedback to HRM planners.

The city is growing, and so is our team! This summer, we hired a planning student to research what other Canadians cities are doing to build complete communities and promote gentle density in the suburbs. While promoting sustainable development patterns, we also worked hard to protect our green network and hosted another summer of "Hike the Greenbelt" hikes.

Remembering Alan Ruffman

by HOWARD EPSTEIN /// EAC Volunteer

2022 was a terrible year. Not only for the clear arrival of the climate effects organizations like the Ecology Action Centre have been predicting and documenting for the last 50 years, but also for the deaths of a number of friends and allies. The year ended with the death in his sleep of Alan Ruffman - Citizen Ruffman - on Dec. 28 at age 82.

Alan came to Nova Scotia from Ontario to do graduate work at Dalhousie University in geology. He became a marine geologist, while taking an active interest in all aspects of his science, and of science generally. Crucially for the EAC, he met and befriended its founders: Brian Gifford, Cliff White, Kathleen Flanagan, David Reynolds and a handful of others. In those early days, the EAC was a spin-off of a class project, housed happily by the university in the basement of the Forrest Building. Alan brought his science learning, his enthusiasm, his foresight, his good cheer, his warm voice and his unforgettable smile.

For decades, Alan along with his spouse, Linda Christiansen, a professor of sociology at Saint Mary's University, engaged in local

Howard (he/him) was executive director of the EAC from 1991-1994. Subsequently he was elected as a municipal councilor and then MLA for Halifax Chebucto.

a downtown historic stone building. Visiting his office was always a treat: stuffed full of papers, maps, rock samples and an air of bustle, it was accessed by stairs adorned with tree slices/rounds and whale bones collected on explorations in Newfoundland and Scandinavia. Alan wrote papers on a wide variety of subjects, becoming an expert on such topics as iceberg scour and the Titanic - on which he published a fine book. I was fortunate to work with Alan in public consultations and

formal hearings over such issues as the Sable Offshore Energy Project (oil and gas extraction) and sewage management for Halifax Harbour, as well as downtown land development proposals. The EAC and the other community organizations involved in these discussions would not have been able to do such an effective job of taking these matters to the court of public opinion without Alan. The good reputation of the EAC rests in no little measure on such efforts.

land-use planning issues while keeping an eye on the context of

energy use. Alan established a consulting company, Geomarine, in

Alan and Linda lived for decades in a house overlooking the outer reaches of the Harbour, with views out their panoramic windows of container ships, whales and storms. If I were able to arrange it and it were still the mode, I would place Alan in a dory along with his papers, set it alight and consign him to the ocean. It would be a fitting memorial for Alan, our warrior and our friend.

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Want to know what it feels like to join 5,000 other voices for change?

Become a member of the Ecology Action Centre today and find out!

How?

Call or email Florence Wallace of our membership team.

Call: **902 429 2202 ext. 106** Email: **membership@ecologyaction.ca** Or sign-up online: **ecologyaction.ca/become-member**

SAVE THE DATE!

RAISE A RACQUET FOR THE ENVIRONMENT IS BACK IN 2024!

GET YOUR RACQUETS READY AND MARK YOUR CALENDARS FOR FEBRUARY 17 & 18, 2024.

Join the Ecology Action Centre for a thrilling weekend of tennis at the Atlantic Tennis Centre.

LOCAL BUSINESSES: Align your brand with the EAC. Become a sponsor and make a lasting impact! Contact Brandy Rivers, Event and Volunteer Officer, at **brandy.rivers@ecologyaction.ca**.

TENNIS PLAYERS: From beginners to pros, everyone's welcome! Step onto the court and be part of something bigger.

Stay tuned for registration info by signing up on our website: **ecologyaction.ca/tennis2024**