

THE VILLAGE GREEN

Number Nineteen, March 9, 2020

COLLINGWOOD CLIMATE PARTNERS TO CELEBRATE EARTH DAY – YOU'RE INVITED!

All readers of *The Village Green* (and for that matter, any others) are cordially invited to attend an Earth Day Proclamation and Flag Raising, jointly sponsored by the Nature League, Blue Mountain Watershed Trust, the Environment Network and the Collingwood Climate Action Team, at the Collingwood Public Library on **Wednesday, April 22 at 2:00 pm** (the 50th Anniversary of Earth Day). Equally importantly, readers and their friends, be they Collingwoodians, Blue Mountaineers, other Greyites or Bruceites or from anywhere else, are invited to the Post Proclamation meeting and greeting and sharing of climate action ideas immediately following said Earth Day flag raising. Please join CCAT and friends from **2:30 pm to 4:30 pm at the Black Bellows Brewing Company** (one of Collingwood's finest) immediately across the street from the Library. For more information, contact ccatcommengage@gmail.com or visit www.collingwoodclimateaction.com.

Even before that, the Collingwood Climate Action Team is holding its regular general meeting **tomorrow, Tuesday March 10 at 7:00 pm** at the Collingwood Public Library, 3rd floor. If you want to learn, share or roll up your sleeves and help, join this affable group tomorrow evening.

LOCAL AMNESTY INTERNATIONAL GROUP AND BLUE MOUNTAINS CLIMATE GROUP EXPLORE CLIMATE CHANGE AND SOCIAL JUSTICE

Yesterday (Sunday) was International Women's Day. To honor the day an overflow crowd of more than a hundred attended a community session at Thornbury's library entitled **Climate Change and Human Rights: Two Sides of the Same Coin**. Sponsored by Amnesty International, Group 82, in association with the Blue Mountains Climate Action Now Network, the event featured remarks by Sonja Klinsky, Associate Professor at the School of Sustainability, Arizona State University and Senior Sustainability Scientist at the Julie Ann Wrigley Global Institute of Sustainability. Klinsky's work centres on justice dilemmas presented by climate change and on climate change policy design.

After overviewing the causes of global warming, Klinsky pointed out that people facing injustice because of race, gender, age, disability or other factors face amplified assaults on their rights because of climate change – amplification deep and enduring. She pointed out the necessity of “seeing” populations at risk of injustice – populations that can easily remain invisible to us. Klinsky called on attendees to use their “points of intervention” to combat the injustices – points of intervention that include our “big life” decisions and daily decisions as well as our roles as political actors and social actors in our communities.

After Klinsky's remarks, locally-focused groups involved in climate action presented overviews of their mandates and activities. The most enthusiastically received of these presentations was an overview by three young climate activists from Thornbury's Beaver Valley Community School about their school's strategies to reduce single-use plastics and to eliminate the creation and improper disposal of trash in their school.

After viewing the video of a tell-it-like-it-is “TED Talk” speech by Greta Thunberg, attendees filled in teardrop-shaped statements of what they could do as individuals to create change. The teardrop commitments will be on display in the Thornbury library for a time, as enduring reminders of the aspirations of those who attended the event.

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IRISH REPORT: WOMEN ARE HURT MOST BY CLIMATE & ENVIRONMENTAL CRISES

To mark International Women's Day the Irish Catholic international aid group Trócaire released a 40 page report entitled **Women Taking the Lead: Defending Human Rights and the Environment**.

Based on a mix of research, international case studies and policy analysis, the report describes pervasive harm and injustice inflicted on women across the world by governments and corporations as women pursue wellbeing for themselves, their families and their communities in the face of climate change:

"Instead of the urgent action that is required to address climate change, states and corporations are acting in the pursuit of profit rather than the fulfilment of the Sustainable Development Goals for all. Indigenous, environmental and land defenders who are resisting these unsustainable actions by corporations and states are facing growing levels of violence and intimidation. Attacks on women human rights defenders have increased every year, with 137 attacks on women related to business and human rights recorded in 2019. Almost half of all of these attacks were against indigenous women and affected rural communities. Renewable energy projects represent a growing threat to human rights, with 47 documented attacks on human rights defenders in 2019 related to renewables. In addition, human rights defenders are being subjected to undue criminal prosecution and judicial harassment due to their role in protecting the environment, including criminal charges, arbitrary arrests, detentions, and strategic lawsuits brought by companies. Between 2015 and 2018, 12 carbon majors (active fossil fuel producers that are the largest corporate contributors to greenhouse gas emissions) brought at least 24 lawsuits against 71 environmental and human rights defenders for a total \$904m of damages. Along with the challenges of attacks, intimidation, smear campaigns, criminalisation and judicial harassment, women human rights defenders are also challenging gender norms and patriarchal systems, which compounds the risk they face. Women are increasingly under attack, not only for what they are challenging but also for who they are."

The report also strikes a positive note in acclaiming the positive changes women have made:

"Across the world, in spite of multiple barriers, women are leading in the design and implementation of actions to fight for natural resource and land rights, and addressing environmental degradation and climate change impacts at local levels. The Huairou Commission reported that living and working in areas of poverty and marginalized from decision-making processes, women have been addressing water and sanitation issues, upgrading infrastructure, and seeking sustainable energy resources because conditions of the built environment directly affect their ability to improve their lives and their families. The role of women in embedding change and bringing it to scale, is essential. It is equally important that women are also represented in leadership roles addressing strategic gender needs that are related to climate action at parliamentary and international level so that these issues are addressed in all spheres."

The report is available at

https://www.ncronline.org/sites/default/files/file_attachments/Trocaire%20report%202020-Women%20Taking%20the%20Lead.pdf.

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GREY-BRUCE ORGANIZATIONS WILL HOST FOOD SYSTEM TALKS

The roles of agriculture and food production in worsening or helping to solve the climate crisis are often overlooked, particularly by urban dwellers who have little contact with how their food is grown or how vast tracts of rural land are used (or abused). Folks in this area have a great opportunity to learn about these issues through an upcoming series of four talks with questions and answers entitled ***How Can Food Systems Regenerate the Earth?***

These four talks (no advance registration required) will be presented by Thorsten Arnold, a noted local farmer, scientist, and climate and food systems advocate. The talks will be held on a “pay what you can” basis on four Sundays this spring, each at 1:30 pm at the Harmony Centre, 890 4th Avenue East, Owen Sound:

1. Sunday March 15: ***Biosphere Self Regulation of its Climate***
2. Sunday April 5: ***Regenerative Agriculture and the Biosphere***
3. Sunday April 26: ***Food Systems for the Biosphere***
4. Sunday May 3: ***Making Holistic Land Use Decisions.***

If you aspire to grow things in the earth or simply to tread lightly on it, this lecture series is for you! It’s co-sponsored by the Grey Bruce Sustainability Network, the Bruce-Grey Owen Sound Climate Action Team, Eat Local Grey Bruce and St. George’s Anglican Church, Owen Sound.

GARDENING AND WEATHER CHANGE: GREY AG HAS A LESSON FOR YOU

To brighten the dullness of March (and the sprightly gardening months thereafter), Grey Agricultural Services is offering a two and a half hour seminar, ***Gardening in Changing Weather Patterns***, (with a focus on ornamentals). The event will be held from **7:00 pm to 9:00 pm on Thursday March 26** at the Grey County Agricultural Services Centre, 206 Toronto St. South, Unit 3 in Markdale. Says the Grey Ag poster for the event:

“How do we as gardeners adapt our best practices in horticulture to deal with potentially unpredictable changes in our environment? Grey County Master Gardeners will describe the impact of changing weather patterns on our ornamental gardens – with some application to food gardening. We will then consider strategies for maintaining our healthy gardens through times of change, with a focus on plant selection and care, water management and soil enhancement.”

The cost is a mere \$15. To register, contact Grey Ag at info@greyagservices.ca or at (519) 986-3756.

EVENT WILL DISCUSS THE FUTURE OF FARMING

On **Saturday May 9 from 1:00 pm to 3:00**, Eat Local Grey Bruce will host a “pay what you can” discussion at Grey Roots Museum 102599 Grey Road 18, Owen Sound, entitled ***The Future of Farming: Where Do We Want to Go?*** At this interactive event, Amy Kitchen of Sideroad Farms, Heather Shouldice of Buff Farm and Kristine Hammel of Persephone Market Garden will chat about the future of farming in the region. Within the context of climate change and regenerative farming practices, these are three people doing innovative and important work – please join them to hear what they have to say. For more information contact Hannah at eatlocaloutreach@gmail.com.

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WANNA START OR JOIN A GARDEN CLUB?

If you do, you'll want to attend a seminar at **1:00 pm on Saturday March 21** at the Frog Ponds Café, 209 8th Street East in Owen Sound. Called ***Growing Together***, the event will be led by expert gardener Kristine Hammel of Persephone Market Garden. Attendees are invited to donate to the Bruce-Grey Owen Sound Climate Action Team. To reserve a spot, please contact Gardening@Pure-Harmony.ca.

Growing Together gardening clubs comprise folks who hold work bees at the gardens of members and who share tips, seeds and tools. People who have gardens share their space with those who don't, and seasoned gardeners join forces with people who want to learn.

STUDENTS WIN WITH CLIMATE SPEECHES

It's heartening to see discussion of climate action percolating more often into public life, and to see terms related to climate change becoming more common in daily discourse.

This crossed your Beloved Editor's mind the other day when he read in the ***Flesherton Advance*** that two winners of the Flesherton-Markdale Legion (Branch 333) public speaking competition spoke on climate-related themes. Jack Farmus of Agnes Macphail Public School in Flesherton spoke about "Electric Cars" and Nic Pallister spoke about "The Carbon Footprint of Beef Production". Nic went on to win second place in the Intermediate Division at the Legion's Zone 3-C public speaking competition in Harriston.

Congratulations to Jack and Nic, and to all the young local citizens brave enough to speak in public on subjects important to our communities.

MARKDALE: GIVING NEW MEANING TO "GREEN GROCER"

Markdale's new Foodland held its well-attended grand opening on February 27 in the middle of a blizzard. Months before the doors opened, folks from the Grey Highlands Climate Action Group (CAG) engaged the genial owners, the Grahams, in discussions about how to maximize the greenness of their supermarket. These two parties have opened an ongoing avenue for improving their community.

Working in a non-preachy cooperative way with new businesses (and older ones too) may be an emerging role for climate action groups in this region. Particularly in smaller communities, business struggle to survive, and it's through partnerships with local climate activists that businesses can find ways to become or remain green without endangering their survival (and possibly ways that increase the odds that they will thrive).

The Village Green looks forward to hearing how climate activists in other communities work with local businesses and with chambers of commerce.

By the way, Foodland was the second new business the Climate Action Group engaged in its brief but productive life so far. A few months ago a Tim Hortons outlet opened in Markdale, and the CAG engaged the owner in discussions about issues of trash control and sustainability.

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ART FOR GREEN'S SAKE: HEAR A POET / ACTIVIST

Marshalling art for the sake of our environment – and celebrating the environment through art – are necessary parts of climate action and of living gracefully on the earth. Come on out on **Friday March 20 from 6:30 pm to 9:00** (doors open at 6:00 pm) to the Owen Sound & North Grey Union Public Library, 824 First Avenue West in Owen Sound, to hear a poet and climate activist extraordinaire – Liz Zetlin – give a talk entitled ***Leaning Towards Water: Art, Activism and Resilience in the Anthropocene***.

This is an encore presentation of a talk Zetlin gave through the Bluewater Association of Lifelong Learning. Refreshments will be provided (please bring your own water bottle).

CLIMATE GROUPS CREATE NEWSLETTERS

Two climate action groups want to talk with the world.

The Collingwood Climate Action Team has just produced the inaugural issue of what will be its quarterly newsletter. Produced as a PDF document, it's packed with interesting information. If you'd like a copy or if you'd like to be on the distribution list for future issues, please contact Sherri Jackson, Communications Lead for the Collingwood CAT, at ccatcomms@gmail.com. Said the Collingwood CAT's leadership team in the inaugural newsletter:

"We have six action groups: communications, community engagement, carbon conversations, energy, transportation, consumption & waste reduction. Projects are underway and we have a strong operating team supporting the efforts of working group participants and volunteers.

We have also created some great foundational elements including our website, social media, media connections and development of a positive working relationship with the town (both council and staff). We're all in this together. Common ground amongst everyone in the community will go a long way to make the transition to a low carbon sustainable future. We look forward to 2020 being a banner year for making a significant shift in climate action and creating a positive, low carbon future for us all."

The Bruce-Grey Owen Sound Climate Action Team is in the process of creating a newsletter and welcomes the names of potential avid readers (and even non-avid ones). If you'd like to receive their newsletter, please let the **Village Green's** Beloved Editor (John Butler) know at agora@xplornet.com. He will forward your expression of interest and your e-mail address to the soon-to-be-award-winning journalists at the Climate Action Team.

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CLEARVIEW IMPLEMENTS “VOLUNTARY BAN” ON SINGLE-USE PLASTICS

On Aug. 12, 2019, Clearview Township Council passed a motion to implement a voluntary ban on single-use plastics in the township. Clearview, which includes Stayner and Creemore, is south of Collingwood and east of Grey Highlands and Blue Mountains. Although “voluntary ban” sounds like a contradiction in terms, it seems to be a step toward a full single-use plastics ban in the township. The voluntary ban includes single-use plastic shopping bags, water bottles, cutlery, straws and stir sticks, but acknowledges that some single-use plastic may be required for health needs or food safety.

Clearview Council has instructed staff to phase out the sale and use of bottled water and the use of single-use plastics at municipally-owned facilities and events, to increase the use of personal water bottle refilling stations and to develop a plan to implement a full ban of single-use plastics effective July 1st, 2021. Clearview has created a “Quench Trailer” for filling water bottles at community events.

STUDY: CLIMATE CHANGE BODES ILL FOR ALBERTA

Alberta has posted a climate study on its website that suggests a greater climate effect on Alberta than on most other places as result of global heating. The report was originally commissioned by Alberta’s NDP government that was defeated in the province’s April 2019 election. One can assume that the current Alberta government released it with reluctance.

Entitled **Alberta's climate future: final report 2019**, the report was prepared by climatologists Katharine Hayhoe and Anne Stoner from Texas Tech University. It summarizes observed and projected changes for more than 30 climate indicators, and reveals that temperature increases across Canada are greater in northwestern parts of the country than in southeastern parts.

The report says that that for each degree of global mean temperature increase, Alberta could expect:

- A 2 C increase in average winter temperature and a 1.5 C increase in average summer temperature
- An increase of about 3 C in the temperature of the coldest day of the year and an increase of about 2 C in the temperature of the warmest day of the year
- A two-week lengthening of the frost-free season, and between a two to four week lengthening of the growing season, with greater changes for more southern locations
- A five to 10% increase in precipitation between September and April, with between five to 10% more falling as rain compared to snow
- A 50% increase in the number of very wet days (more than 25 mm in 24 hours) and a 20% increase in the amount of precipitation on the wettest day of the year.

Says the report:

“Some additional amount of future change is inevitable, due to human choices that have already been made and human emissions that have already occurred. This is the result of inertia in the physical climate system in responding to human emissions of carbon dioxide, methane, and other heat-trapping gases that have already occurred, and inertia in the energy sector in transitioning from traditional fossil-based energy to low or zero-carbon energy.”

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A significant amount of future change, however, can be avoided by reducing and eventually eliminating carbon emissions from human activities, compared to the changes that are likely to occur if the world continues to rely on fossil fuels for the majority of its energy....

The observed and projected future changes documented in this report have the potential to affect Alberta's agriculture, economy, ecosystems, energy demand, infrastructure, and more. For example, as temperatures increase, the optimal growing zones for specific crops, as well as for entire ecosystems, such as the coniferous forest, will shift poleward. The geographic range of pests and diseases limited by cold winter temperatures will also expand northward. Decreasing risks of extreme cold and increased risk of extreme heat and heavy precipitation have the potential to affect both public and private infrastructure, with implications for a broad range of sectors, from insurance to energy demand for heating and cooling residential and commercial buildings."

FEDS HELP FUND MANITOBA-TO-SASKATCHEWAN POWER LINE

On March 2 the federal government announced it will spend \$18.7 million to help fund an 80-kilometre hydro transmission line running from western Manitoba to Saskatchewan, to help Saskatchewan reduce its dependence on coal-generated electricity. The project's remaining cost of \$42 million will be covered by Manitoba Hydro, a provincial Crown utility. The line will allow up to 215 megawatts of Manitoba's surplus renewable hydroelectricity to flow into the SaskPower energy grid.

SUNNY SOUTHERN ALBERTA WILL HOST CANADA'S LARGEST SOLAR FARM

Thanks to \$500 million in funding from Denmark-based Copenhagen Infrastructure Partners, construction will start this summer on Canada's largest solar farm, located in southern Alberta's Vulcan County and slated for completion in 2021 according to the project's owner, Greengate Power. Called the Travers Solar Project, it will comprise 1.5 million solar panels generating 800 million kilowatt hours of electricity per year, enough to power 100,000 homes. The site is close to ideal because southern Alberta averages 300 days of sunny skies annually.

Greengate Power already operates Canada's largest wind farm, also in Vulcan County.

Another large Alberta solar project is in the works. The 30-MW Claesholm Solar Project, owned by Perimeter Solar Inc. and located on the Claesholm Hutterite colony's land 125 kilometres south of Calgary, will be operational by late September 2020, thanks to funding from another Danish firm, Obton A/S, which bought a 49% interest in Perimeter Solar in 2017. This project became feasible when TC Energy (well known here for its controversial Meaford gravity-fed power generation proposal) agreed to buy half of the Claesholm solar farm's electricity output.

ALBERTA RIGID FOAM SQUASHING

Most of us wrestle at times with bulky nearly weightless rigid foam slabs that we cart to the recycling depot, aware that we are largely recycling air. In St. Albert, near Edmonton, a firm called Styro-Go uses equipment in its mobile truck to heat the slabs and squash the air out of them to create plastic bricks that are easier and cheaper to transport to plastic recycling sites. The equipment compresses the material at a 90-to-1 compression ratio.

The St. Albert program is a pilot project but Styro-Go hopes to expand to Edmonton and Calgary.

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NAVAHO GREEN POWER TO LIGHT UP LOS ANGELES

For 40 years the Navajo Nation produced electricity for Los Angeles through its coal-fired Navajo Generating Station, partly owned by the City and located on Navajo land. The dirty coal plant has closed but L.A. and the Navajo have turned to re-purposing to preserve their relationship. The Los Angeles City Council has voted unanimously to partner with the Navajo Nation to turn the former coal plant into a renewable energy hub, including wind, solar, and hydro. The Los Angeles Department of Water and Power must conduct a feasibility study to ensure this partnership wouldn't be too costly for city ratepayers or the Navajo Nation, but if done right, the project could preserve an important long-term partnership.

It could also discredit the "*Bang, you're dead*" theory of what happens when fossil fuel plants close. Managed well, such closings may be transformational rather than apocalyptic.

CALIFORNIA ENVIRONMENTAL GROUP SUES TEN BIG PLASTIC POLLUTERS

The environmental group Earth Island Institute filed a lawsuit in California last week against ten companies – Coca-Cola, Pepsi, Nestlé, Clorox, Crystal Geyser, Mars, Danone, Mondelēz International, Colgate-Palmolive, and Procter & Gamble – for knowingly misleading the public about how much of their produced plastic is being recycled – plastic that often ends up in the ocean instead. The lawsuit claims that 8 million to 20 million tons of plastic end up in the world's oceans every year and that plastic will outweigh fish in the ocean by 2050 at the current rate of dumping. Said Josh Floum, Earth Island's Board President: "*This is the first lawsuit directly to take on these plastic peddlers who for years have spread the fake narrative that their products can be recycled when they know in many cases this is simply not true.*"

The lawsuit wants these companies to be forced to pay to remediate the harm that plastic pollution has caused to the Earth and oceans, to pay to clean up the mess they've made and to stop labeling their plastic bottles as recyclable.

A WARM WINTER

The U.S. National Oceanic and Atmospheric Administration (NOAA) has identified three major climate trends so far this winter.

- Record-warm temperatures in Scandinavia, Asia, the Indian Ocean, the central and western Pacific Ocean, the Atlantic Ocean, and Central and South America (in short – damned near everywhere). The most notable warmer-than-average land temperatures were present across much of Russia and parts of Scandinavia and eastern Canada, where temperatures were 9.0°F (5.0°C) above average or higher.
- Polar sea ice coverage that is smaller than normal. Arctic sea ice coverage was 5.3% below 1981-2010 average and Antarctic sea coverage was 9.8% below.
- Low snow coverage. Northern Hemisphere snow coverage was below the 1981–2010 average, having the 18th-smallest January snow cover in the 54-year record.

NOAA's data also show that January 2020 was the warmest January on record for the Earth (the NOAA global temperature dataset record dates back to 1880). January 2020 marked the 44th consecutive January and the 421st consecutive month with temperatures above the 20th century average.

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SHALE GAS VENTS PLAGUE TEXAS

As oil prices plummet, oil bankruptcies mount and investors shun the shale industry, America's top oil field – the Permian Shale Basin that underlies much of Texas and New Mexico – faces new challenges that make profits unlikely for the financially failing shale oil industry.

The best oil-producing shale in the Permian Basin already has been drilled and fracked over the past ten years. Drillers have moved on to less productive areas of the Basin.

Many problems can be traced to two issues for the Permian Basin: the quality of its oil is low, and vast volumes of natural gas come from its oil wells. These massive amounts of methane come at a time when the price of natural gas has reached a record low. Oil producers now pay companies to take away their natural gas – or if they don't have the infrastructure to capture and process it, they burn (flare) it or vent it directly into the atmosphere – and methane is a very powerful greenhouse gas. Older wells are a problem too. Shale wells become "gassier" or produce more natural gas as they age and as oil production falls.

The public has become more aware of the problem of uncontrolled methane discharges, in part through the work of Earthworks, an organization that uses a special camera that "sees" invisible methane leaks. It will become a bigger issue as satellites are launched that map industry methane leaks from space. One such satellite recently revealed a well blowout in Ohio that produced the second biggest methane leak in American history. Fracking CEOs have publicly said this issue will interfere with their "social license" – the ongoing societal acceptance of drilling and fracking. But if the U.S. shale industry can't flare or vent excess methane, companies may shut down oil production due to cost.

U.S.: INSURANCE RISKS GET RISKIER

As U.S. institutions rethink how they operate in the face of climate change, insurance companies and lenders are reducing their risks from flooding, wildfires, and other natural disasters – a shift that puts a bigger burden on governments (and thereby on taxpayers) as they become insurers of last resort for the increasing number of homeowners living in vulnerable areas. Homeowners in much of Florida, Texas and California now rely on subsidized state programs, which struggle to stay financially sustainable. A recent paper from the U.S. National Bureau of Economic Research found that homes at risk of flooding in the U.S. are overvalued by us\$34 billion, pointing to a potential real estate bubble stemming from climate threats.

Mortgage lenders making loans to homebuyers in high-risk areas increasingly sell these riskier loans to Fannie Mae and Freddie Mac, government-supported companies that back roughly half the U.S.'s us\$10 trillion mortgage market. If government-backed insurance programs and mortgages fail, it could result in demand for billions of dollars of taxpayer money for bailouts.

And if these climate risks are left unaddressed, the combined effects could trigger something like the massively destabilizing subprime mortgage crisis of 2007 – but this time fueled by climate change.

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U.K. OKs WIND AND SOLAR FARM SUBSIDIES

The UK's government has abandoned its ban on subsidizing new onshore windfarms, four years after it stopped supporting new projects. It will now allow competitions for subsidies alongside solar power developments and floating offshore wind projects, in a new auction plan announced last week. The U-turn follows the government's pledge to cut emissions to virtually zero by 2050, a target that will require the UK's onshore wind-power capacity to triple in 15 years.

Competitions will take place in 2021, allowing new renewables projects to be operational by the mid-2020s if they sign contracts guaranteeing a price for the clean electricity they generate.

MEXICO NIXES MANGROVES

In the last issue of *The Village Green* we described an immense ecological park to be developed in Mexico City, with the blessing and help of Mexico's federal government.

But the *Federales* aren't always that angelic. Mexico's government has turned a blind eye to the destruction of a major coastal mangrove barrier, apparently to facilitate its President's pet project. Such destruction can't be reversed by an *oops!* and a change in government.

As evidenced by satellite images, Mexico's state-owned oil company Pemex has defied a government order by cutting down protected mangrove trees on the site where President Andres Manuel Lopez Obrador has ordered the construction of a us\$8 billion oil refinery at Dos Bocas in Obrador's home state of Tabasco. When Mexico's environmental regulator ASEA gave Pemex a conditional building permit in August 2019, it barred the company from interfering with the mangroves, but to no avail. ASEA will not likely crack down on Pemex. Shortly after issuing the restrictive construction permit, ASEA's executive director Luis Vera Morales resigned. His replacement, Angel Carrizales Lopez, is a former aide to President Obrador. Carrizales Lopez has already canceled a fine against the third-party that admitted to the first wave of mangrove destruction at the site.

Pemex drove the Mexican economy in the 1960s and 1970s but lost us\$35 billion last year. Critics say the Dos Bocas refinery isn't economically viable.

Mangroves are marine trees that form coastal wetland mangrove forests. They are found world-wide in tropical and sub-tropical climates. Mangroves survive in coastal wetland environments where salt and oxygen-poor soil make it impossible for other plants to live. Mangroves thrive in these conditions and create ecosystems that provide food to many marine and terrestrial species. Mangroves provide human societies with ecosystem services valued at us\$1.9 billion world-wide each year. Mexico is one of the countries with the most mangroves in the world, but the country is undergoing rapid loss and destruction of its mangrove forests.

Even if the oil refinery project is cancelled, the mangroves on the site are largely gone.

GREEN TO-DO LISTS GET LONGER

We humans spend inordinate energy putting together lists of things that differentiate us from other species. Near the top of the list – we appear to be the only species that makes lists (I rest my case by citing the Ten Commandments and Paul Simon's song *Fifty Ways to Leave Your Lover*).

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The Guardian, for instance, offers **Fifty Ways to Make Your Life Greener**, at https://www.theguardian.com/environment/2020/feb/29/50-ways-to-green-up-your-life-save-the-planet?utm_term=RWRpdG9yaWFsX0dyZWVuTGlnaHQzMjAwMzAz&utm_source=esp&utm_medium=Email&CMP=greenlight_email&utm_campaign=GreenLight. Most of these are things we can do as individuals

As well, Project Drawdown has identified 82 things we can do as societies to combat global warming, including their relevant sectors (e.g., transportation, electricity, buildings) and their impact on addressing climate change, measured as gigatons of CO₂ equivalent that would be reduced / sequestered between 2020 and 2050. Results are presented in terms of their impact under two scenarios:

1. Scenario 1 stops climate change close to 2°C of global warming
2. Scenario 2 stops climate change close to 1.5°C of global warming.

The solutions can be viewed in alphabetical order, or ranked by size under Scenarios 1 or 2. The 82 initiatives are at <https://www.drawdown.org/solutions/table-of-solutions>.

So – 132 things to do. A bit more than a morning’s work, eh?

OUR READERS KNOW A THING OR TWO

Plastics as Carbon Sinks

A dear reader, reflecting on several items in the previous issue of *The Village Green*, points out the importance of examining the complexities of the creation, use and disposal of plastics:

“One of the challenges in this game is the issues are complicated, and what is good for the environment in one respect may be bad in another. In your *Facts That Help You Change The World* section, one of the items starts with ‘Only 9% of all the plastic waste ever created has been recycled’ while in *Our Readers Know A Thing Or Two* we see that ‘Tomorrow’s web site includes a blog at <https://www.tmrow.com/blog> and in that blog we see that the second of Five Climate Myths That Need to Die is ‘Avoiding single use plastics is good for the climate.’ A recent *Scientific American* article makes a related point – namely that non-biodegradable plastics are actually a carbon sink whereas the bio-degradable ones end up as methane and CO₂. The problem with plastic bags is when they end up in the ocean (or if in some other way they enter the food chain), but if that is prevented by compaction and burial then they may in fact be a boon rather than a curse.”

Cambridge Climate Lecture Series

A dear reader recently introduced us to the **Cambridge Climate Lecture Series**, a collection of videos on YouTube compiled by climate scholars at Cambridge University.

These videos address the scientific, political and sociological aspects of climate change – well worth a watch! They are at https://www.youtube.com/channel/UC1H24g_mMgH4aKb7U08InxA/videos.

Our dear reader may compile the most relevant and interesting of these videos into a joint presentation and discussion session to be held in this area – more on this as it unfolds.

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IN MY HUMBLE OPINION: THE SACRED AND THE GREEN

This article is a modest proposal for the creation, by faith communities, of faith groves within our cities and towns. Bear with me while I wander toward that suggestion.

I was raised in Sudbury in the 50s and 60s. Sudbury at that time was a city situated amid pollution-blackened bedrock and apocalyptic barrenness – but its downtown streets were named after trees – Elm Street, Pine Street, Cedar Street, Larch Street – bearing witness to the abiding importance of trees as symbols (by the way, I am a proud alumnus of Elm Street Public School, and of St. Charles College on Pine Street).

Trees were woven into my life in other ways. As a ten year old I read my first novel for grown-ups – ***A Tree Grows in Brooklyn*** by Betty Smith, themed around the allegory of the ailanthus tree. The novel begins with a passage alluding to the poor of Brooklyn. circa 1900:

“There’s a tree that grows in Brooklyn. Some people call it the Tree of Heaven. No matter where its seed falls, it makes a tree which struggles to reach the sky. It grows in boarded-up lots and out of neglected rubbish heaps. It grows up out of cellar gratings. It is the only tree that grows out of cement. It grows lushly... survives without sun, water, and seemingly without earth. It would be considered beautiful except that there are too many of it.”

As a student in residence at Trinity College in Toronto, my first few months of homesickness were assuaged by visits to a massive planter in front of U of T’s Sidney Smith Hall containing a single birch tree – bedraggled, but birchy enough to remind me of northern Ontario’s lakeside birch forests. And as I looked out my dorm window I could see a cluster of five pine trees – four of them perfect in shape, but one of them imperfect – its top two feet bent at a right angle to the customary perpendicularity of pine trunks. That tree taught me. It was imperfect but it didn’t know it was imperfect. It simply lived its life, just as we are all imperfect and we live our lives.

At that time I discovered the poet Allen Ginsberg’s poem ***Sunflower Sutra*** about a dead flower in a railroad junkyard – not a tree – that was nonetheless kin to my bent-topped pine:

*“A perfect beauty of a sunflower! a perfect excellent
lovely sunflower existence! a sweet natural eye
to the new hip moon, woke up alive and excited
grasping in the sunset shadow sunrise golden
monthly breeze!*

*How many flies buzzed round you innocent of your
grime, while you cursed the heavens of the
railroad and your flower soul?*

*Poor dead flower? when did you forget you were a
flower? when did you look at your skin and
decide you were an impotent dirty old locomotive?
the ghost of a locomotive? the specter and
shade of a once powerful mad American locomotive?*

*You were never no locomotive, Sunflower, you were a
sunflower!”*

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It later occurred to me how thoroughly trees are woven into our religions and mythologies. To the Abrahamic religions, the fruit of the Tree of Knowledge in the Garden of Eden helped seal our fate as imperfect struggling creatures. In the Christian version of that cluster of faiths, a cross of wood dragged through Jerusalem by the son of a carpenter unsealed our fate. To Buddhists, it was under the protective shade of the Bodhi Tree – a fig tree – that Siddhartha Gautama (the Buddha) sat without moving for 49 days until he attained enlightenment or *bodhi*. To the ancient Norse, Yggdrasil was an immense ash tree – the centre of the cosmos – where the gods assembled to govern the world. The concept of the “world tree” is a common theme in Mesoamerican spiritual belief. The most revered and protected work of art in China is **The Six Gentlemen**, an ink painting done on rice paper in the year 1345 by Ni Zan ([https://www.wikiwand.com/en/Six_Gentlemen_\(painting\)](https://www.wikiwand.com/en/Six_Gentlemen_(painting))). It’s a grove of six trees representing the isolation but perseverance of Confucian scholars in a time of violent upheaval. Its title comes from a poem written on the painting by fellow artist Huang Gongwang:

*“Distant cloudy mountains range across the autumn river;
Nearby, ancient trees huddle by the sloping shore.
Six gentlemen stand facing one another,
Upright, straight, outstanding, unbending.”*

These benign images and recollections are about single trees or small groves. Countervailing these images are the darker themes of trees in congregate, of murky forests, of wildernesses where child-eating wolves and malevolent ogres live. Perhaps the farmer part of our minds fears the uncontrollability of forests – except we are now controlling them: we are killing them. Yet old stories die hard. In Russian folklore the forest is the home of Baba Yaga, the cannibalistic witch (adding misogyny to our fear of the forest). To Little Red Riding Hood, the safety of Grandma’s House is virtually canceled by the danger of the forest she traverses. Hansel and Gretel, without their trail of farm-born crumbs, would be swallowed up by the forest. And to call something a “wilderness” or “jungle” is not a compliment.

We love trees but we fear too many of them. We admire Johnny Appleseed who plants trees and Paul Bunyan who chops trees down. Historically we’ve much preferred the idea of the garden to the idea of the forest.

Which brings me to a video I recently viewed about the “church forests” that have traditionally surrounded Coptic Christian churches in rural Ethiopia. Meant to symbolize the Garden of Eden, these cool green mini-forests have been gnawed away in modern times by neighboring farmers and urban encroachment. But a move is afoot among Ethiopians to restore them: please see the video on this movement at https://aeon.co/videos/how-hundreds-of-small-gardens-of-eden-guard-against-total-deforestation-in-ethiopia?utm_source=Aeon+Newsletter&utm_campaign=991d6df8bf-EMAIL_CAMPAIGN_2020_03_02_04_51&utm_medium=email&utm_term=0_411a82e59d-991d6df8bf-71004591.

So here’s a thought. Why don’t faith communities in towns like Collingwood and Owen Sound and Durham and Hanover cooperate to create a “faith grove” on donated land in each community – a plot of land on which faith communities jointly plan, plant and maintain trees, and in which humbler little plants and critters find a home too.

Granted, each grove would be a mere Tinker Toy forest, more important as symbol than as full blown forest. But symbols are important, and even a toy forest is an ecosystem for the more modest of God’s plants, bugs, scurriers, creepers and birds. It could be shaped enough to allow visitors to learn and rest and refresh themselves, but unkempt enough to let nature offer up its astounding surprises. Even grumpy old atheists might be willing to help.

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While a faith grove may not be a formally sanctified space, it would be akin to the holiness we associate with a temple, synagogue, masjid, gurdwara, chapel, meeting-house or church – but a holiness of growth that transcends stone and brick, glass and silver, creeds and concrete.

respectfully submitted to the *Polis*,
John Butler

ARTEMESIA SPRING

Here in the sly waters
of the swamp
Here in the busy waters
of the creek
Here in the siren waters
of the lake
Here in the languid waters
of the mist
Here in the brooding waters
of the rain
Nomadic colonies
Of hope
Set sail.

John Butler

SHE SAID / HE SAID

“This spring, consider the earth. Not just the blue dot ... the earth we walk on, and that provides our food. Agriculture can play a crucial role in future food security and carbon sequestration.”

Sherri Jackson, Editor, Collingwood CAT spring 2020 newsletter

“Just as the generation before us practiced hiding beneath their desks under the threat of thermonuclear war, we are preparing for a future that is charred and blackened. The big difference is, the threat we face from climate change is actually happening, and there’s no drill to give us a false sense of protection from it... The bleak outlook of uncertainty can lead one to ask, ‘Why bother trying?’ But that way of thinking is partly what got us into this mess in the first place. Back when climate change was still known as global warming prior to the more dire predictions of today, many people thought some version of: ‘I’m only one person,’ ‘This won’t affect me,’ or ‘What do I have to offer?’ Fear and uncertainty can lead people to run away or assume they have nothing to offer. As a result, many people remain bystanders as they watch the destruction unfold before them when they actually have the opportunity and ability to do something.”

clinical psychologist Kristi E. White

“You can bury your head in the sand. You can pretend that this isn’t happening. You can put your fingers in your ears and go la-la-la, but the science is very, very clear.”

former Alberta NDP environment minister Shannon Phillips

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*I will arise and go now, and go to Innisfree,
And a small cabin build there, of clay and wattles made;
Nine bean rows will I have there, a hive for the honey bee,
And live alone in the bee loud glade.*

*And I shall have some peace there, for peace comes dropping slow,
Dropping from the veils of the morning to where the cricket sings;
There midnight's all a glimmer, and noon a purple glow,
And evening full of the linnet's wings.*

*I will arise and go now, for always night and day
I hear lake water lapping with low sounds by the shore;
While I stand on the roadway, or on the pavements grey,
I hear it in the deep heart's core.*

Lake Isle of Innisfree, William Butler Yeats, 1890

“We are the ones who are driving climate change for the first time in the history of the planet. It isn't volcanoes. It isn't natural cycles. It isn't the sun. It is us. And our energy choices will determine our future. So the further and further we go out into the future, the more we see decade by decade, the 2050s, the 2070s, 2100, the more we see the influence of the choices that we make today. If we wait until we see those impacts, it's going to be too late to make the choice. Just like if we are being loaded onto the ambulance, being taken to the hospital for a heart attack, it's too late to say, 'oh, I'll join a gym and I'll eat healthy.' We have to make those decisions earlier in the same way.”

Canadian climatologist Katharine Hayhoe

**behind the stand
of winter trees
a red sunset**

Masaoka Shiki (1867-1902)

**For information about *The Village Green*, or to subscribe to it (free),
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