

PLANETARY HEALTH WEEKLY



CURRENT NEWS ON ECOLOGICAL WELLNESS AND GLOBAL HEALTH

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May 14, 2020

Hi,

I keep wondering what my five grandchildren will learn in their history books in another ten years about what is happening now, or what their grandfather will tell them, should I be so lucky. I think most people believe this is one of the most important, egregious and monumental times of our lives. Another week, another 600,000 cases and 34,000 deaths worldwide; some countries getting better, some getting worse, conspiracy theories propagate, politicians continue showing their worth or not, scientists show their worth but are we listening? The rush to get back to normal gets into higher gear, despite the faintest of light at the end of the tunnel, complete with dire warnings for moving too quickly including the darkest winter yet to come. Responsibility still remains with us to follow public health guidance.

While we here in Toronto (and much of eastern North America) had almost winter like weather this past week, I went out yesterday, during our only sunny day in a while, to find solace and beauty in a nearby park (see Endshots) and exercise, trying to keep my body in some semblance of fitness. It remains my daily routine to get out of the house for a long walk or bicycle ride. I find the days pass so quickly, while the weeks seem endless, let alone the months, and it's only been two or three since the beginning of all this. The thought of many more to come is daunting; I must start to adapt. Patience is the name of the game, and seemingly to have it without end.

As I read and watch the news, over many hours each day, I continue to be amazed at the divergence of opinion and actions, though it isn't so bad here in Canada. How can there be such polarization over such an identified, mean and determined enemy? Doubt and uncertainty reign. Data are hard to interpret, and why don't we get it explained better? Lots of questions are being asked as we continue being consumed

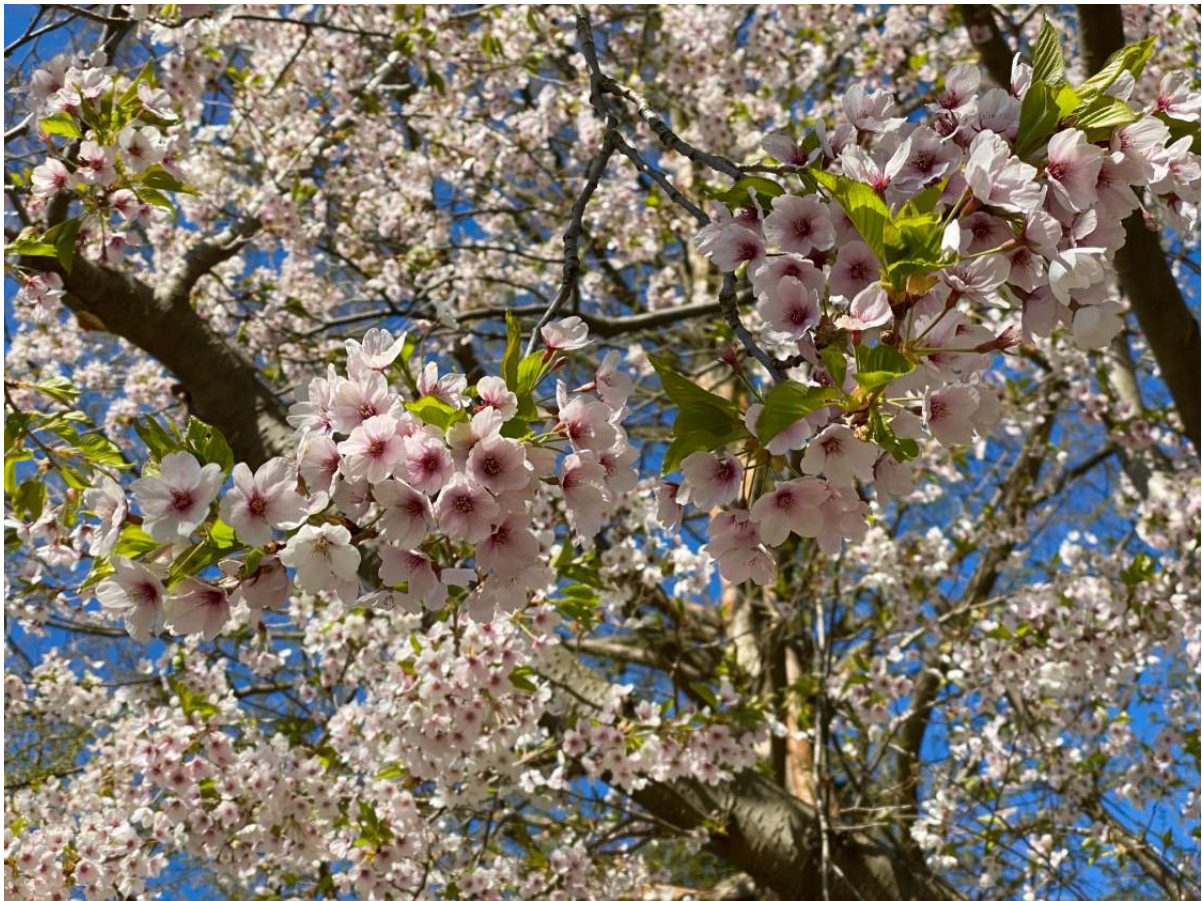
by the virus in all aspects of society in every corner of the globe. Perhaps this dark cloud of doubt, mistrust, division and me first is its greatest victory. In today's ***Planetary Health Weekly*** (#20 of 2020) you'll find more of this cloud, including:

- Coronavirus Updates including:
 - The horror of Canadian nursing homes,
 - The virus's preferences,
 - Why we weren't ready,
 - Antivaxxers join virus protests,
 - Demanding test data,
 - How hair salons will change,
 - 100+ NY children seriously sick with possibly related disease,
 - Making a face mask,
 - Pandemics that shaped history,
 - Llama antibodies proving useful, and
 - Sweden's different approach, and
 - Russia goes viral and doctors die, then
- The rising risk of nuclear war,
- Rebirth of the food sovereignty movement,
- Kolkata records high PM2.5 stroke deaths,
- Nigeria's rice revolution,
- Cesarean delivery's association with obesity and diabetes,
- How our lungs can magically heal,
- Solar panel windows,
- Canadian challenges for justice and sustainability,
- President Roosevelt's depression era nature corps,
- *Sharks of the Coral Canyon* video,
- The mysterious demise of freshwater mussels,
- Wolf extermination in Alaska,
- Child stunting and wasting in 35 poor countries,
- *The Citizen Guide to Climate Success*, a new book by Mark Jaccard,
- Making virtual classes more fun and A virtual conference for teachers, and
- Endshots showcasing the beauty of Toronto's High Park.

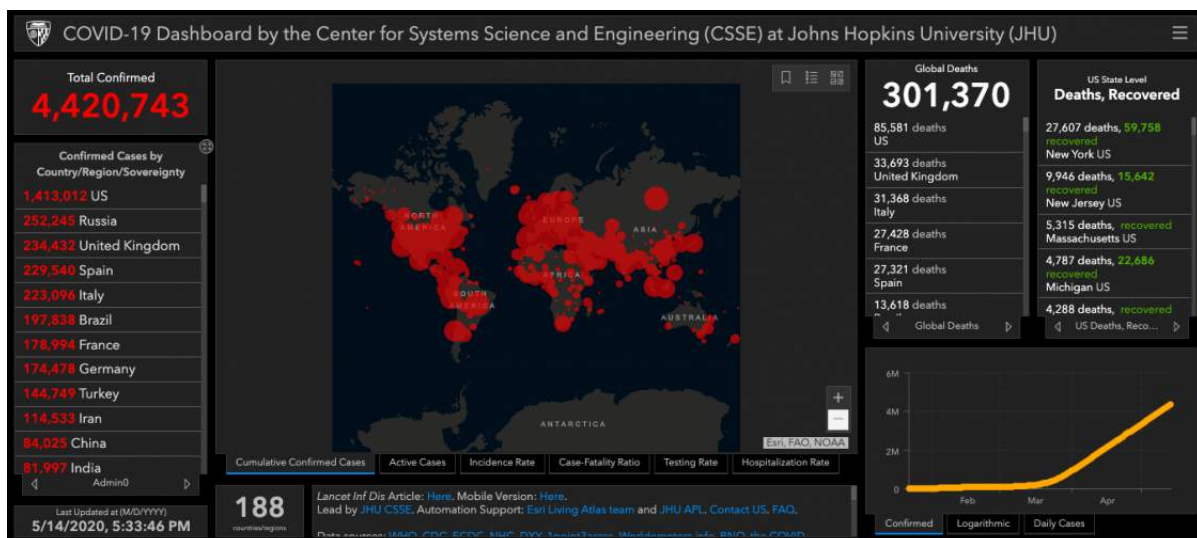
I hope you'll take a look.

Best, david

David Zakus, Editor and Publisher



THE BEAUTY OF SPRING



SARS-CoV-2 & COVID-19 UPDATES

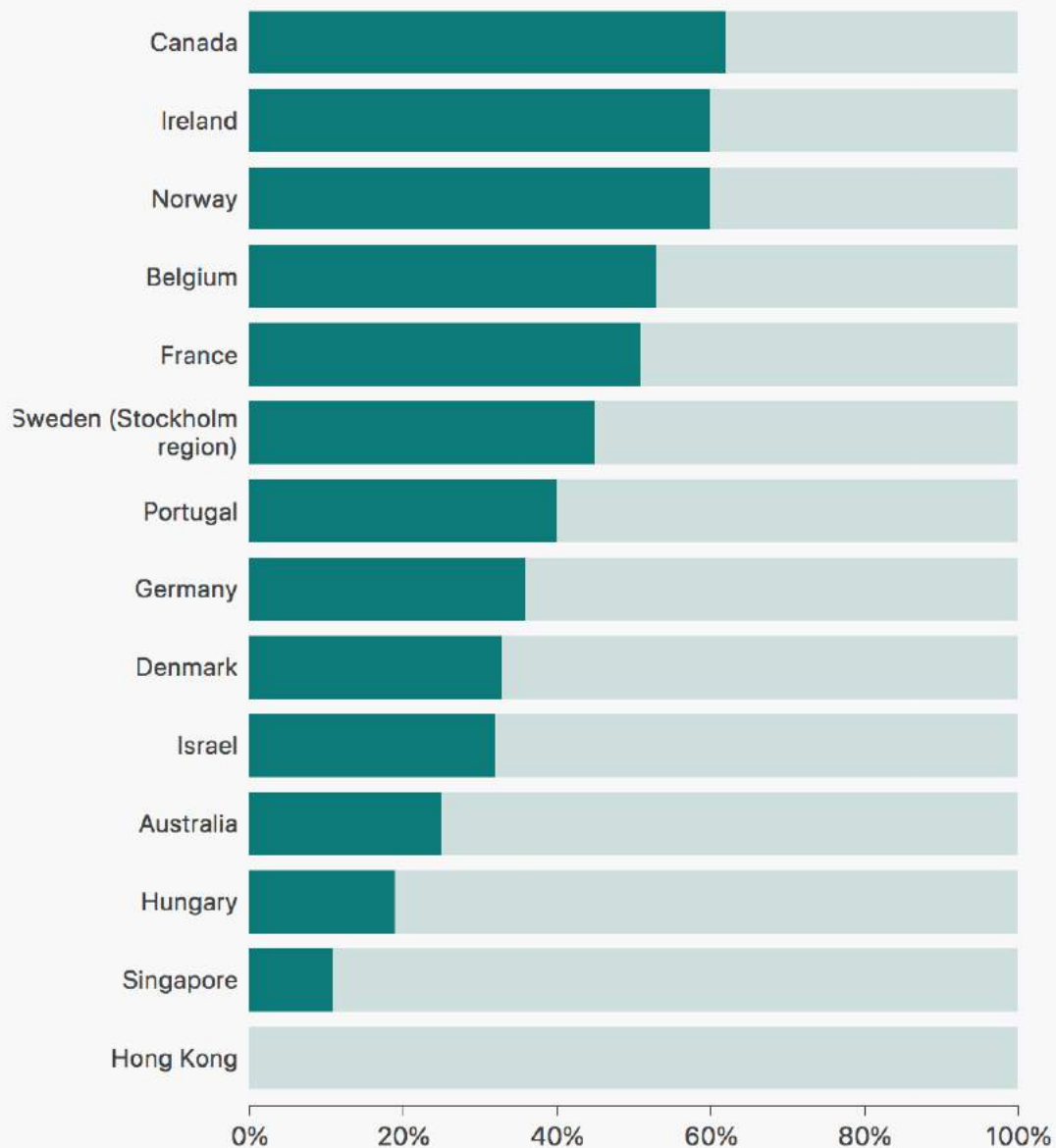
The Proportion Of COVID-19 Deaths In

Long-term Care Was Measured In 14 Countries. Canada Had The Worst Record

Canada has highest deaths in long-term care settings

Tap on bars to show the numbers.

- Number of care home resident deaths as % of all COVID19 deaths
- Total number deaths linked to COVID-19



SOURCE: INTERNATIONAL LONG TERM CARE POLICY NETWORK

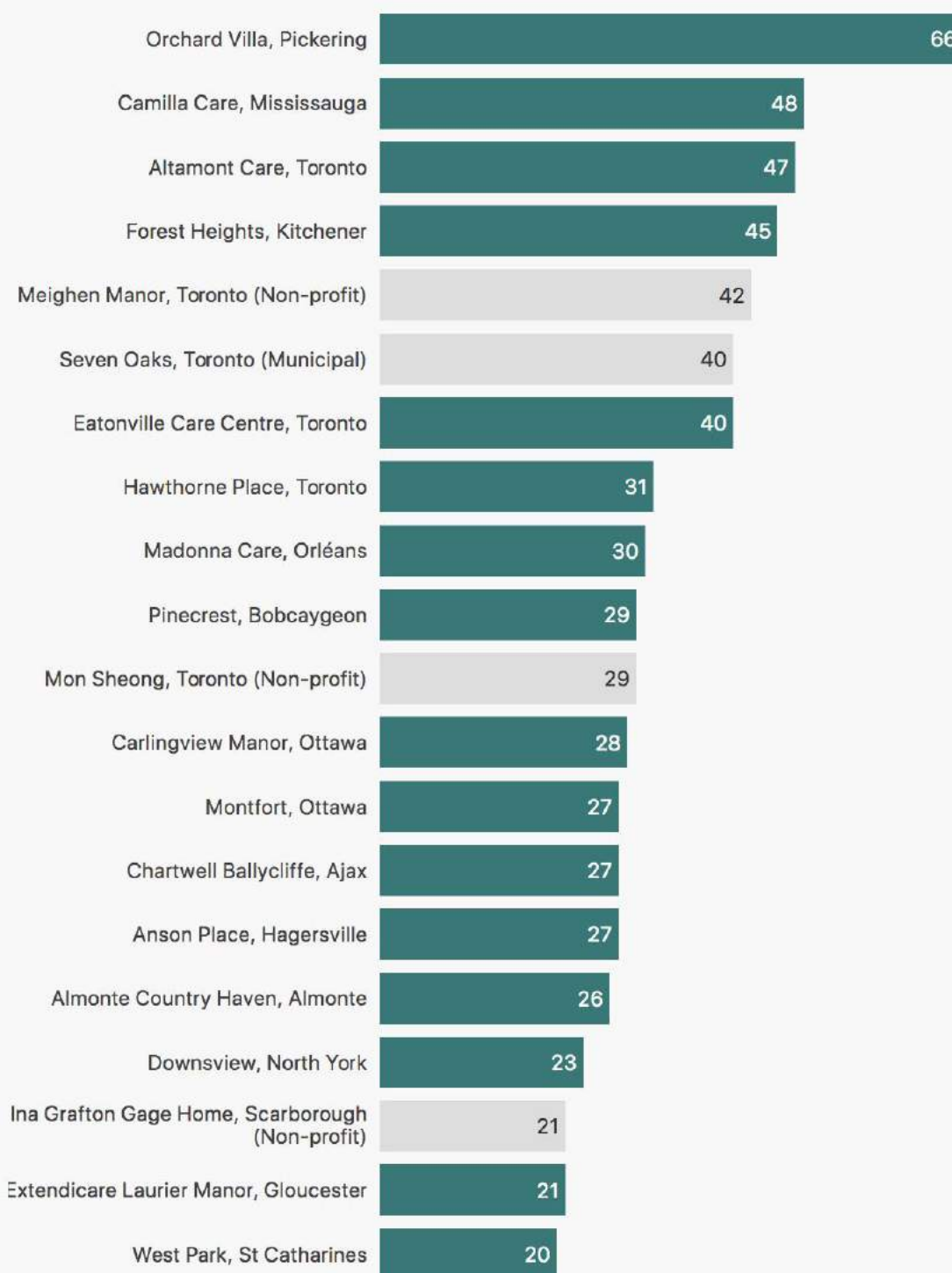
STAR GRAPHIC

For-Profit Nursing Homes In Ontario Have Four Times As Many COVID-19

Deaths As City-Run Homes, Star Analysis Finds

Of Ontario's 20 deadliest COVID-19 outbreaks, 16 are in for-profit facilities

Confirmed COVID-19 deaths in Ontario long-term-care homes.



Credits: Star Graphic

Canada has the highest proportion of deaths from [COVID-19](#) in long-term-care settings among 14 countries, according to a study by the International Long-Term Care Policy Network. As of May 2, residents in long-term care accounted for 62% of all

deaths from the virus in Canada. Although the report found that countries with fewer deaths in total typically had lower deaths in long-term care, that was not the case for Canada, which has had comparatively lower fatalities than countries such as Germany and Belgium, which are included in the [study](#). [Read more at The Star](#)

Residents of for-profit nursing homes in Ontario are far more likely to be infected with COVID-19 and die than those who live in non-profit and municipally-run homes, the (Toronto) Star has found. Its analysis of public data on long-term-care homes shows the facilities have been hit by outbreaks at approximately the same rate, regardless of ownership. But once [COVID-19](#) makes it into a nursing home, the outcomes have been far worse for residents of for-profit homes. In homes with an outbreak, residents in for-profit facilities are about twice as likely to catch COVID-19 and die than residents in non-profits, and about four times as likely to become infected and die from the virus as those in a municipal home. [Read More at The Star](#)

SEE ALSO:

At The Star: [The proportion of COVID-19 deaths in long-term care was measured in 14 countries. Canada had the worst record](#)

At New York Times: [The Covid-19 Riddle: Why Does the Virus Wallop Some Places and Spare Others?](#)

At NewYorker: [Why Weren't We Ready for the Coronavirus? \(and lots of history\)](#)

At New York Times: [Antivaccination Activists Are Growing Force at Virus Protests](#)

At New York Times: [F.D.A. Orders Companies to Submit Antibody Test Data](#)

At Vogue: [How Hair Salons Will Be Transformed by the COVID-19 Pandemic](#)

At NBC New York: [100+ NY Children Sick With Rare COVID-Related Illness, State Finds; Here Are the Warning Signs](#)

At Wired: [How to Make a CDC-Approved Cloth Face Mask](#)

At NewYorker: [Pandemics and the Shape of Human History](#)

At The Tyee: [Llama Antibodies Could Treat COVID-19. And More Science Journal Findings](#)

At Daily Kos: [Sweden never shut down, now its death rate AND its economy are worse than its neighbors](#)

At The Star: [As Coronavirus Overruns Russia, Doctors Are Dying On The Frontlines](#)

Risk Of Nuclear War Rises As U.S. Deploys A New Nuclear Weapon For The First Time Since The Cold War



Credit: Commons.Wikimedia.org

The Federation of American Scientists revealed in late January that the U.S. Navy had deployed for the first time a submarine armed with a low-yield Trident nuclear warhead. The USS Tennessee deployed from Kings Bay Submarine Base in Georgia in late 2019. The W76-2 warhead, which is facing criticism at home and abroad, is estimated to have about a third of the explosive power of the atomic bomb the U.S. dropped on Hiroshima. The International Campaign to Abolish Nuclear Weapons (ICAN) called the news “an alarming development that heightens the risk of nuclear war.” We’re joined by William Arkin, longtime reporter focused on military and nuclear policy, author of numerous books, including “Top Secret America: The Rise of the New American Security State.” He broke the story about the deployment of the new low-yield nuclear weapon in an article he co-wrote for Federation of American Scientists. He also recently wrote a cover piece for Newsweek titled “With a New Weapon in Donald Trump’s Hands, the Iran Crisis Risks Going Nuclear.” [Watch more on Youtube](#)

The Rebirth Of The Food Sovereignty

Movement



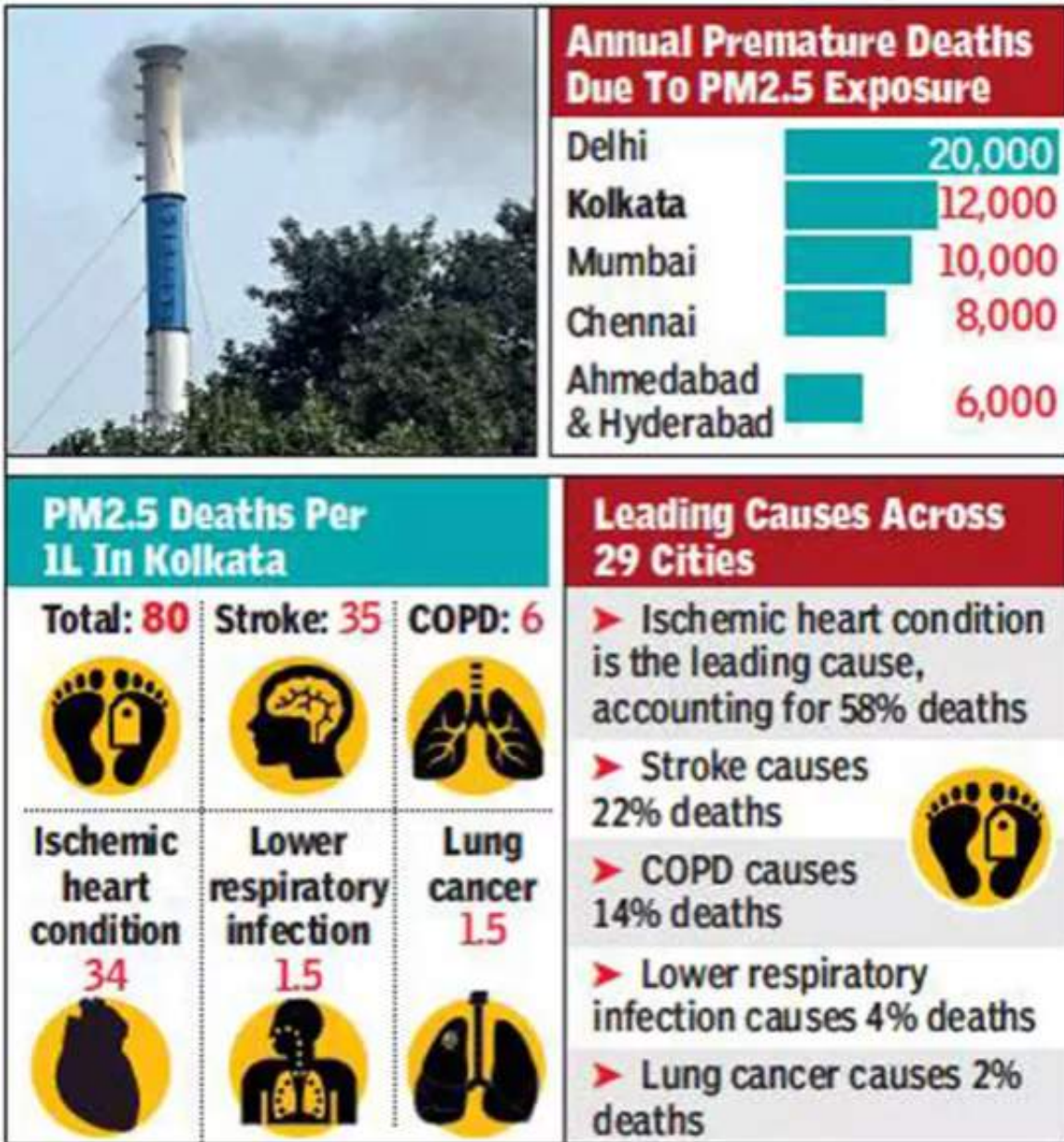
Credit: Lori Eanes

As the pandemic settles into a new normal, many people have pivoted from panic buying to “panic planting.” Seed companies are reporting an unprecedented surge in demand from home gardeners. Some extension agencies—the land grant universities’ programs that provide research and educational support to farmers and hobbyist gardeners—are seeing a skyrocketing interest in gardening education programs. The new passion for home food production has even extended to livestock. Poultry-raising operations and feed stores are experiencing such a spike in interest for laying hens that they are nearly running out of young chicks. As Katie Brimm wrote recently for *Civil Eats*, “We may be on the verge of a resurgence of World War II–style Victory Gardens.” Now, the world has been turned upside down, and the winter of doubt has turned into a spring of guarded hope among food sovereignty activists. [Read More at Sierra Club](#)

Kolkata Records Highest Stroke Deaths Due To PM2.5 Exposure

GASPING FOR BREATH

Graphic: Dipankar Chanda



Credit: Dipankar Chanda

Hale-and-hearty youngsters suddenly collapsing and dying of stroke is not an unheard-of phenomenon in the city. A study by IIT-Kanpur has attributed the exposure to PM2.5 in the air to the high premature mortality rate in Kolkata, a reason that had remained mostly unexplained so far. In fact, stroke death rate due to PM2.5 exposure in a city was the highest in Kolkata, revealed the study, which surveyed million-plus populations in 29 cities in India. "People usually associate air pollution with effect on lungs and respiratory systems. But evidence shows the largest health impact of air pollution is associated with cardio-vascular systems. Kolkata's annual concentration of PM2.5 in 2019 was 77 microgram per cubic meter ($\mu\text{g}/\text{m}^3$). Kolkata needs to cut down on 47% of its PM2.5 count to meet the national ambient air quality standard of 40 $\mu\text{g}/\text{m}^3$. It would automatically result in an 18% reduction in premature mortality. The figure will go up to 80% if the World Health Organisation (WHO)

standard of 10 µg/m³ is met,” said air-pollution expert and CSE executive director Anumita Roychowdhury.

Total premature deaths per 1-lakh (100,000) population in the city due to PM_{2.5} exposure is 80, out of which 35 is due to stroke, 34 due to ischemic heart disease, 6 COPD, 3.5 lower respiratory infection and 1.5 because of lung cancer. [Read More at The Economic Times](#)

Can Nigeria's Rice Revolution Help It Beat Oil Addiction?



Credit: THOMAS IMO/PHOTOTHEK VIA GETTY

Okey Ikenna, 28, teases a grain of rice with his fingers from a bowl in his grocery store in Lagos. The grain is a blend of milk-white and scanty black seeds in a bag embossed with flower patterns. It's part of a new economic design that Nigeria is molding. Since the oil boom of the 1970s, Nigeria has built its economy around crude, which contributes 90% of the nation's external earnings and 70% of its total revenues. "In the past, there was no way most of the rice in my shop would have been made in Nigeria," says Ikenna, tapping bags of local rice stacked on a wooden threshold. "But it's happening," said Okey Ikenna, grocery store owner in Lagos. "The agri-food sector in Nigeria as a whole is expanding," says Kwaw Andam, Nigeria Program Leader and research fellow with the International Food Policy Research Institute. He links recent

progress to “government protection of domestic production.” For sure, there is still much to learn from global competitors, says Andam, before Nigeria can fully realize “a thriving, competitive domestic rice sector.” Nigeria has arable land, irrigation opportunities and a pool of youth. But there’s more to do. Still, there’s a shift for the better that’s finally turning Nigerian rice farming into an attractive profession that can compete with imported rice. [Read More at OZY](#)

Association Of Birth By Cesarean Delivery With Obesity And Type 2 Diabetes Among Adult Women



Credit: nasimi@AdobeStock [111224529](#)

Cesarean delivery is associated with an increased risk of childhood obesity in offspring and type-2 diabetes in adulthood. However, whether this increased risk also includes obesity-associated conditions remains unclear. In this cohort study of 33 226 women born between 1946-1964, those born by cesarean delivery were 11% more likely to be obese as adults and had a 46% higher risk of developing type 2 diabetes than women born by vaginal delivery. The study suggests that women born by cesarean delivery may have a higher risk than women born by vaginal delivery of being obese and developing type 2 diabetes during adult life. [Read More at JAMA Network](#)

GOOD NEWS

Lungs 'Magically' Heal Damage From Smoking



Credit: Getty Images

Your lungs have an almost "magical" ability to repair some of the damage caused by smoking - but only if you stop, say scientists. The mutations that lead to lung cancer had been considered to be permanent, and to persist even after quitting. But the surprise findings, published in *Nature*, show the few cells that escape damage can repair the lungs. The effect has been seen even in patients who had smoked a pack a day for 40 years before giving up. The study uncovered this happening on a massive scale in a smoker's lungs even before they had cancer. The researchers still need to assess how much of the lungs are repaired. The study focused on the major airways rather than the small structures called alveoli, where oxygen crosses from the air we breathe into our lungs into the circulatory system. Dr Rachel Orritt, from Cancer Research UK, said: "It's a really motivating idea that people who stop smoking might reap the benefits twice over - by preventing more tobacco-related damage to lung cells, and by giving their lungs the chance to balance out some of the existing damage with healthier cells." [Read More at BBC](#)

MORE GOOD NEWS

Windows Will Soon Generate Electricity, Following Solar Cell Breakthrough



Credits: Dr Jae Choul Yu

Semi-transparent solar cells that can be incorporated into window glass are a "game-changer" that could transform architecture, urban planning and electricity generation, Australian scientists say in a paper in *Nano Energy*. The researchers - led by Professor Jacek Jasieniak from the ARC Centre of Excellence in Exciton Science (Exciton Science) and Monash University (both in Australia) - have succeeded in producing next-gen perovskite solar cells that generate electricity while allowing light to pass through. They are now investigating how the new technology could be built into commercial products with Viridian Glass, Australia's largest glass manufacturer. This technology will transform windows into active power generators, potentially revolutionizing building design. "Rooftop solar has a conversion efficiency of between 15 and 20%," Jasieniak said. "The semi-transparent cells have a conversion efficiency of 17%, while still transmitting more than 10% of the incoming light, so they are right in the zone. It's long been a dream to have windows that generate electricity, and now that looks possible." The team is now working on scaling up the manufacturing process. [Read More at Solar Daily](#)

OPINION

Canadian Challenges For Justice And Sustainability In The Anthropocene



Credit: Pixy

Tanya Talaga's insightful and sensitive Massey Lectures about the history of cultural genocide of indigenous people in Canada – with the trauma of residential school experiences, tragic suicides of indigenous youth and inadequate social/health care services – are reminders of a long history of oppression, neglect and abuse. This shameful treatment of colonized peoples in Canada (and others world-wide), together with racially discriminatory practices, has played a significant role in undermining universal human rights and shaping wide disparities in health in Canada. [The Anthropocene Exhibition at the Art Gallery of Ontario](#) provided irrefutable photographic evidence, on a global scale, of the immense biological and environmental threats to the future of all life on our planet from ever escalating consumption of natural resources and relentless pursuit of economic interests. Canada today could offer a more hopeful future for indigenous people and all of us. It could provide exemplary local and global co-operative leadership towards achieving greater peace, equity and sustainability with less wasteful use of resources, rather than expecting boundless economic growth to solve our problems. [Read More at Science For Peace](#)

SPOTLIGHT ON POLICY

Canada Should Copy President Roosevelt And Create A Nature Corps



Source: [Wikipedia](#)

In March 1933, U.S. President Franklin Roosevelt asked Congress to establish the Civilian Conservation Corps (CCC) as part of his plan to put unemployed people back to work on nature conservation projects. It was the depth of the Great Depression, the longest, worst and most widespread economic collapse of the 20th century. One in four working-age citizens were jobless and the country was in crisis, but Roosevelt argued that investing in nature conservation was "essential to our recovery program." Over the next decade, the CCC employed more than three million people. Two billion trees were planted, soil erosion on 40 million acres of farmland was slowed, streams were stocked, nearly 4,000 sites and historic structures were restored, campgrounds, visitor centres, picnic areas and hiking trails were built — all while providing night classes for workers. Impressively, 800 new state parks were developed.

The longest lasting legacy of Roosevelt's Civilian Conservation Corps was the establishment of hundreds of new parks. This is a goal our federal government has already set for itself, and which Canadians overwhelmingly support, so let's get it done. A Canadian nature corps is not only an investment in nature, it will create jobs, build healthier and more resilient communities, and leave Canada and Trudeau's government with a lasting natural legacy. [Read More at National Observer](#)

SPOTLIGHT ON INDIGENOUS WELLNESS

Coronavirus Cases Surge In Nunavik: Puvirnituk Confirms 10th Case



Credit: APTN Files

Just over two weeks after reporting the region's first case of COVID-19, the Canadian Inuit territory of Nunavik now has almost a dozen people who have tested positive for the novel coronavirus. On April 13, local health officials reported the 10th active case in Puvirnituk, a community of roughly 1,500 located on the northeastern shore of Hudson Bay in sub-arctic Quebec. The surge in positive tests makes Puvirnituk one of the hardest hit Indigenous communities in the country. There are 14 fly-in communities in Nunavik, which is one of four regions that make up Inuit Nunangat, the historical homeland of Inuit in Canada. Three of these communities were under a boil-water notice as of April 8. The plan is to try and limit the potential spread to the other 12 Nunavik communities. [Read more at APTN.](#)

See also:

At APTN: ['A Very Dangerous Situation': Local Leader Expects COVID-19 Curve To Go Straight Up In Northern Saskatchewan](#)

At APTN: [Chiefs Of Ontario Say COVID-19 Spike Is Coming, Urges First Nations To Keep Communities Closed](#)



Credit: Getty Images

Quote Of The Week

[UN Chief Urges Climate Action In Earth Day Address](#)

Efforts against the coronavirus pandemic should not distract from climate change, which is an even deeper emergency, United Nations Secretary-General Antonio Guterres said in an address marking Earth Day on April 22:

"The social and economic devastation caused by climate disruption will be many times greater than the current pandemic," Guterres said as he called on global leaders to ensure business relief funding is tied to greening efforts and sustainable development.

Read More at BBC

Upcoming Events

- May 21st - 23rd: [Indigenous Health Conference: Building Our Future](#) (Niagara Falls, Canada) - Postponed
- June 16th - 18th: [Cities In A Changing World: Questions Of Culture, Climate And Design](#) (Virtual/ New York, USA)
- November 9th-19th: [2020 UN Climate Change Conference](#) (UNFCCC COP26) (Glasgow, Scotland) - Postponed for one year!

FYI#1 SPOTLIGHT ON MEDIA:

Sharks Of The Coral Canyon



Sharks of the Coral Canyon tells the story of how sharks and coral reefs are intricately linked. It follows one of the largest marine science studies in history as researchers work to uncover the inner workings of pristine coral reefs, including the predators. The film tracks scientists as they venture into ferocious ocean currents to reveal first time ever footage of sharks hunting at night, as well as brand new shark hunting behavior. The film witnesses a rare natural spectacle involving thousands of large fish trying to lay their eggs and simultaneously survive a shark onslaught. The film uncovers how two of the most threatened groups of animals in the ocean, corals and sharks, depend on one another, and must be protected together if either of them is to survive into the future.

[Read More and Watch Movie at Living Oceans Foundation](#)

FYI #2

The Mysterious Demise Of Freshwater Mussels



Credit: Meagan Racey

In North America, home to one-third of the world's freshwater mussel species, more than 70% of the mussels are imperilled or have been driven to extinction by pollution, habitat destruction and other human-made hardships. But mass mussel casualties like those in Big Darby are relatively new, and they are happening worldwide. Around the same time as the Ohio incident, thousands of mussels were mysteriously perishing in Tennessee's portion of the Clinch River, which runs through the Great Appalachian Valley. Over-exploitation and the rise of zippers and plastic fasteners brought the pearl button industry to its end in the early 20th century, but a new threat to mussels soon emerged. Although the COVID-19 pandemic has put many scientific field research projects in limbo, the Strike Force hopes to focus its attention this year on mussel deaths in Europe — Sweden in particular — and the Pacific Northwest, where at least 16 die-offs or suspected die-offs have been documented in since 1984.

[Read more at Undark](#)

Wolf Hunt May Have Killed 97% Of Pack In Alaska Archipelago



Credit: Getty Images

Conservationists say this season's unfettered wolf hunt in Alaska's Tongass National Forest may have left only five animals alive in the area. On Wednesday, a coalition of wildlife advocacy organizations sent a [letter](#) to Tongass National Forest officials expressing concern that the latest legal trapping season in the Alexander Archipelago ended up eradicating 97% of the wolf population there. The Alexander Archipelago contains nearly 1,100 islands in a 300-mile span in the southeastern reach of Alaska. "This is a shocking number of wolves to have been taken, and once again there has to be concern for the viability of wolves on Prince of Wales Island," said Nicole Whittington-Evans, Alaska program director for Defenders of Wildlife. "The U.S. Forest Service must engage with the state on wolf management decisions to ensure that this imperiled wolf population and its forest habitat will remain healthy for future generations." Historically, the quota was established at 20% of the wolf population and sometimes lower if the population appeared to be threatened.

FYI #4

Factors Associated With Child Stunting, Wasting And Underweight in 35 Low- And Middle-Income Countries



Credit: AP PHOTO/PHELAN M. EBENHACK

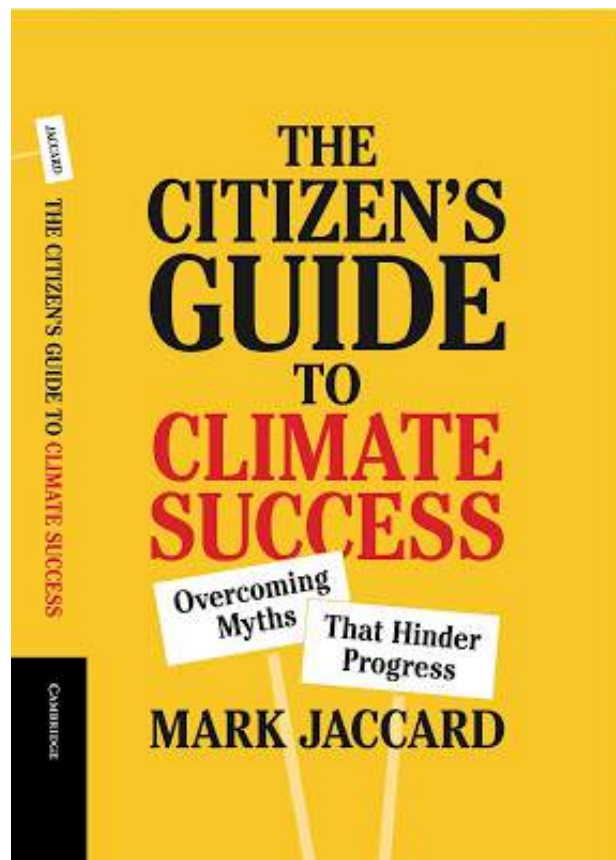
Evidence on the relative importance of various factors associated with child anthropometric failures (i.e., stunting, underweight and wasting) and their heterogeneity across countries can inform global and national health agendas. To assess the relative significance of factors associated with child anthropometric failures in 35 low- and middle-income countries (LMICs) a cross-sectional study of

299 353 children aged 12 to 59 months in 35 low- and middle-income countries was carried out. Household socioeconomic status and parental nutritional status were the leading factors associated with child under nutrition. Environmental conditions, health behaviours, disease prevalence and maternal reproductive care were less frequently associated with child under nutrition, with substantial heterogeneity among countries. Poverty reduction, women's education and nutrition programs for households could be important strategies for reducing child undernutrition; however, country-specific contexts should be considered in national policy discussions.

[Read more at JAMA Network](#)

SPRING READING: NEW BOOK BY MARK JACCARD

The Citizen's Guide To Climate Success



Credit: America the Beautiful, ' 1968. David Hammons

Humanity has failed for three decades to decarbonize our energy system to address the climate threat, yet average citizens still don't know what to do personally or what to demand from their politicians. For climate success, we need to understand the combined role of self-interested and wishful thinking biases that prevent us from acting effectively and strategically. Fossil fuel and other interests delude us about climate science or try to convince us that every new fossil fuel investment is beneficial. But even climate-concerned people propagate myths that hinder progress, holding to beliefs that all countries will agree voluntarily on sharing the cost of global decarbonization; that carbon offsets are effective; that behavioral change is critical; that energy efficiency and renewable energy are cheap; and that carbon taxes are absolutely essential. For success with the climate-energy challenge, we must strategically focus our efforts as citizens on a few key domestic sectors (especially electricity and transportation), a few key policies (regulations and/or carbon pricing); and the identification and election of climate-sincere politicians. As leading countries decarbonize their domestic electricity and transportation sectors, they must use various measures, including carbon tariffs, to ensure that their efforts spill over to affect the efforts of all countries. And although wealthier countries are unlikely to provide the support that developing countries desire to forego dependence on coal and oil, the combination of tariff threats and the local air pollution and climate benefits from decarbonization will motivate efforts even in these poorer countries. This book offers a clear and simple strategic path for climate-concerned citizens to

drive climate success by acting locally while thinking globally.

[Read More at Mark Jaccard's Blog](#)

FYI#6: SPOTLIGHT ON EDUCATION

A Reflection On The Sudden Transition: Ideas To Make Your Synchronous Online Classes More Fun



Credit: solarseven/Depositphotos

The transition to online teaching has been partially, if not completely, challenging for all teachers. I am writing this article while reflecting on my own experiences since March 16, 2020, when our university made the decision to move to online teaching. Online teaching is not new to me; I have spent a great deal of time and effort learning and understanding best practices in online education, and I think I do a decent—if not

stellar—job at it. But the speedy transition to online format has shifted my focus from student engagement and fostering the joy of learning together to “content delivery.” I have experienced a sense of rush and inadequacy, and I feel a need to hide my fears and challenges with this online transition from my students. However, my biggest challenge has been limited engagement in online synchronous classes. Even students who are typically talkative and engaged in face-to-face classes, do not engage as much in an online format. I use a hybrid approach—part of my class is asynchronous and part of it is synchronous online.

See Also:

At Magna Publications: [2020 Teaching Professor Virtual Conference](#)

Read more at Faculty Focus

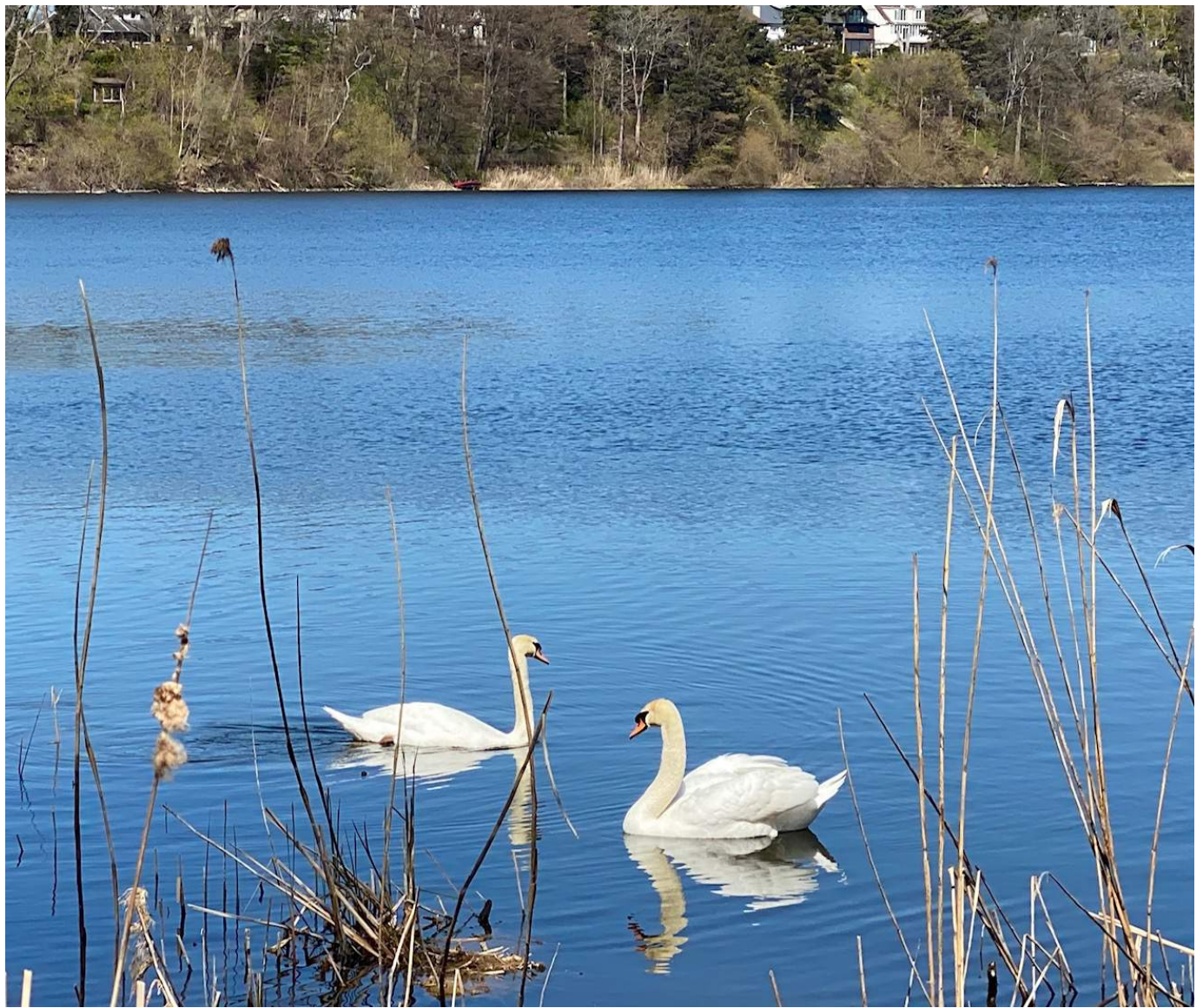
ENDSHOTS

SPRINGTIME BEAUTY

HIGH PARK, TORONTO

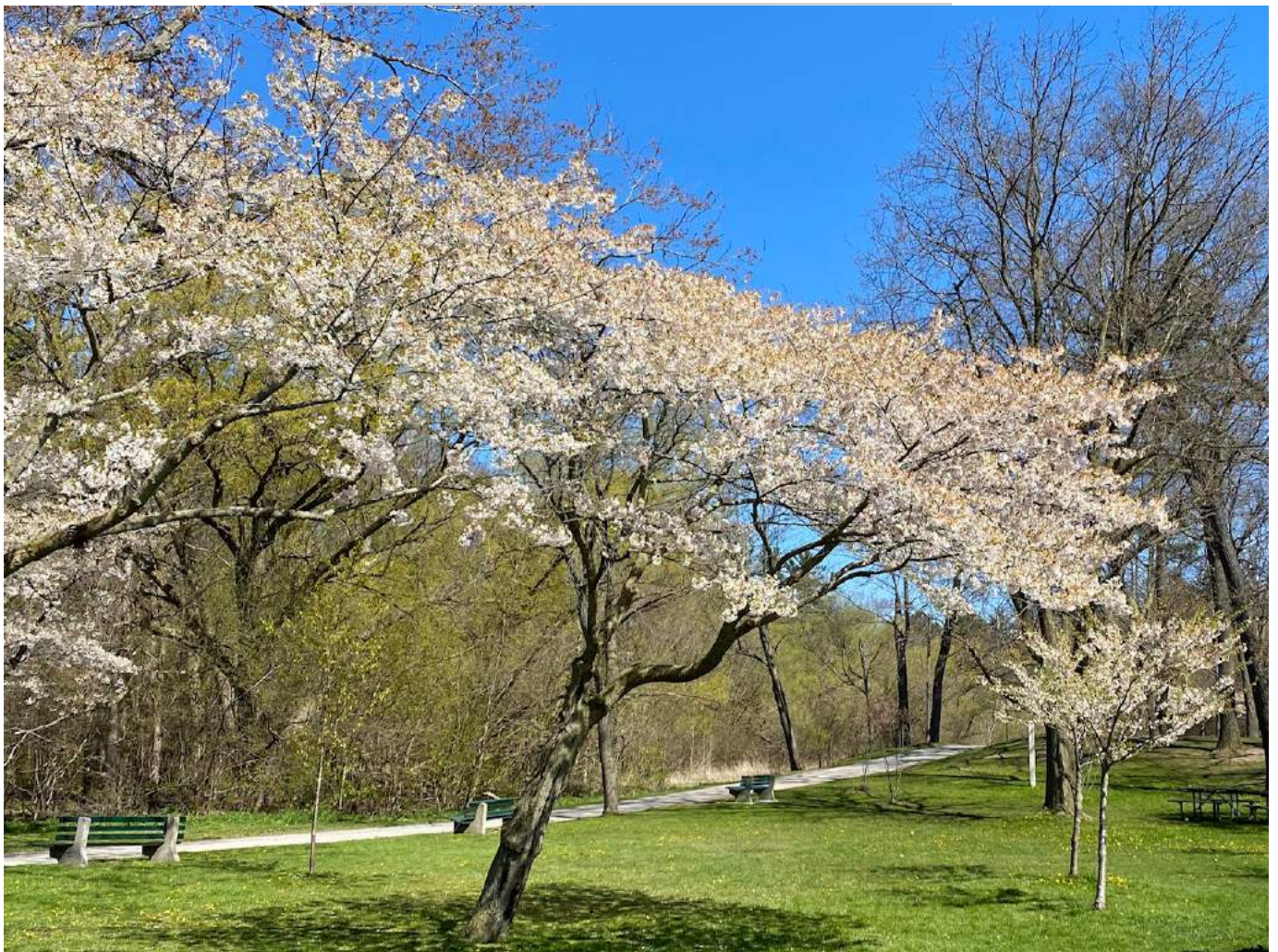
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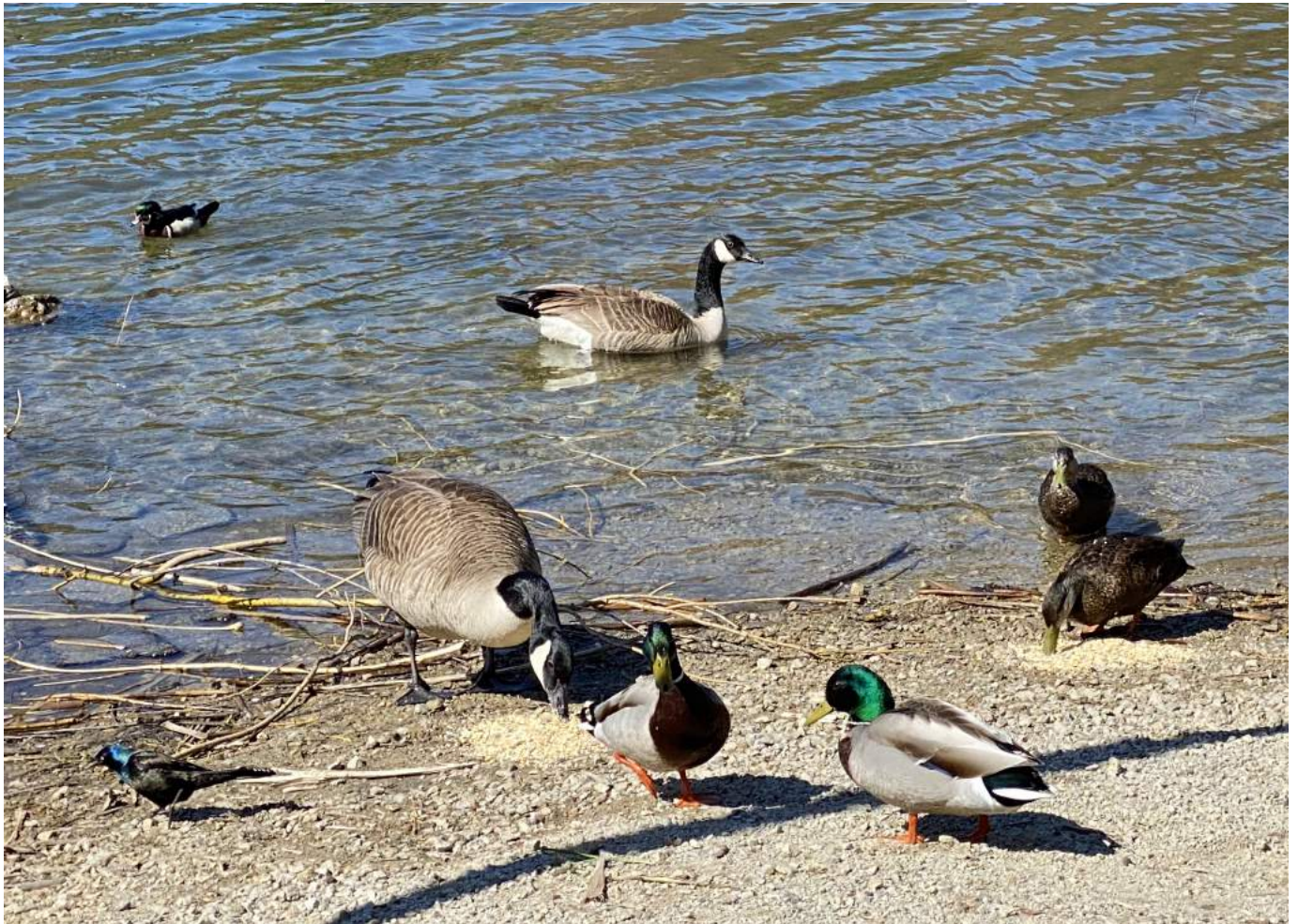


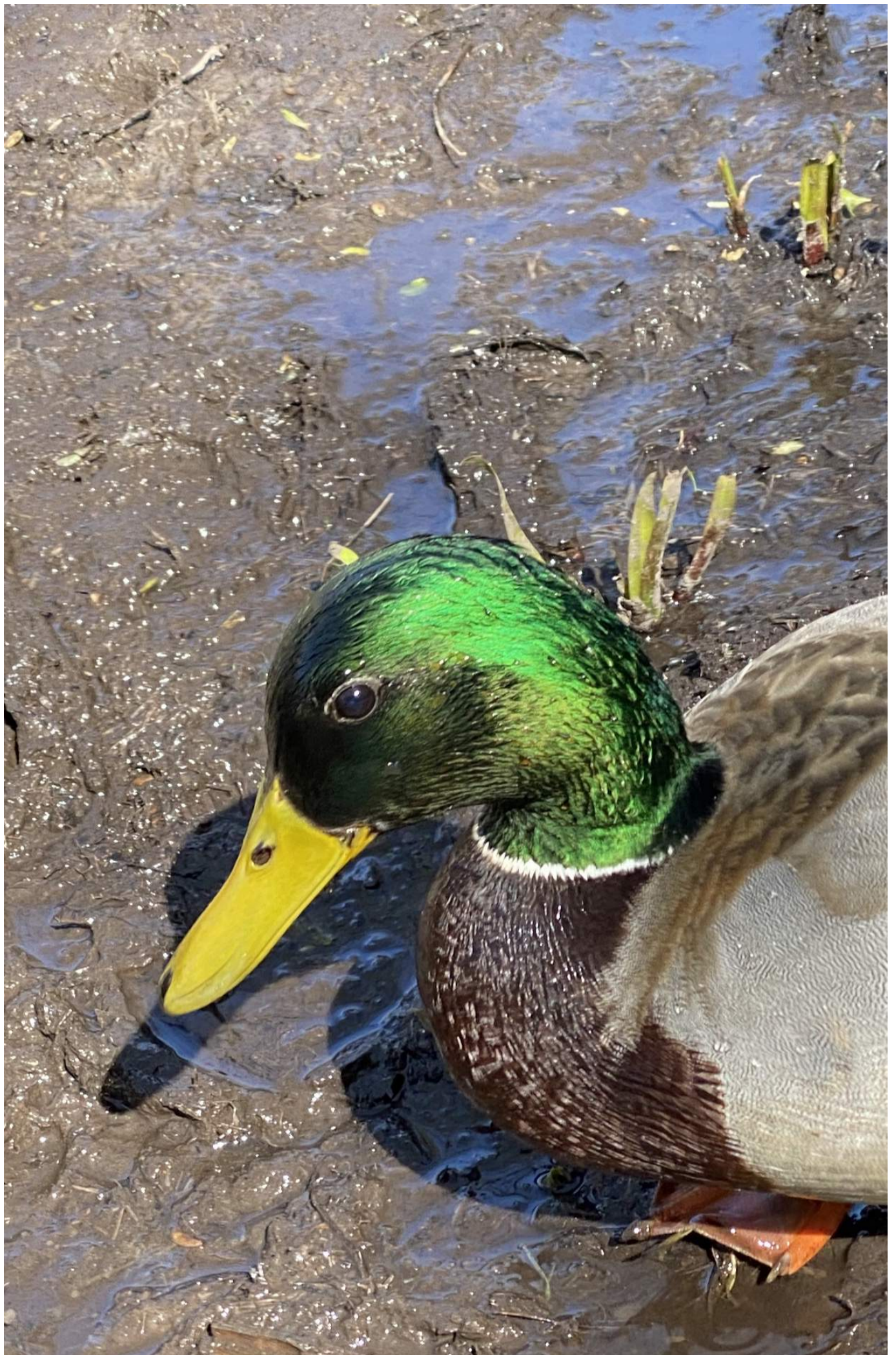














Credits: David Zakus



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