



PLANETARY HEALTH WEEKLY

BRINGING YOU CURRENT NEWS ON ECOLOGICAL WELLNESS & GLOBAL HEALTH

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ARCTIC WARMING: SCIENTISTS ALARMED BY 'CRAZY' TEMPERATURE RISES

An alarming heatwave in the sunless winter Arctic is causing blizzards in Europe and forcing scientists to reconsider even their most pessimistic forecasts of climate change. The primary concern is that global warming is eroding the polar vortex, the powerful winds that once insulated the frozen north. The north pole gets no sunlight until March, but an influx of warm air has pushed temperatures in Siberia up by as much as 35C above historical averages this month. Greenland has already experienced 61 hours above freezing in 2018, more than three times as many hours as in any previous year. Seasoned observers have described what is happening as "crazy," "weird," and "simply shocking". "This is an anomaly among anomalies. It is far enough outside the historical range that it is worrying, it is a suggestion that there are further surprises in store as we continue to poke the angry beast that is our climate," said Michael Mann, director of the Earth System Science Center at Pennsylvania State University. "The Arctic has always been regarded as a bellwether because of the vicious circle that amplify human-caused warming in that particular region. And it is sending out a clear warning."

[Read More on The Guardian](#)

[See Also on the Star: North Pole Thaws Mid-Winter as Temperatures Smash Records](#)



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CANADA HAS AN OPPORTUNITY TO LEAD THE G7 ON GLOBAL HEALTH EQUITY

Canada has an opportunity to show leadership in a domain where we have traditionally excelled: global health. Canadians have learned to build alliances, achieve compromise and promote consensus around shared norms such as human rights, through our history of diversity and nation-building. Harnessing these skills has enabled us, as a "middle power" of moderate economic and military influence, to punch above our weight in foreign policy. *The Lancet* launched a series analyzing Canada's contributions to health at home and abroad. In our paper, we call on the Prime Minister to use the G7 presidency to seize a leadership role in global health equity. This requires meeting four challenges. The first is to close the health gap between Indigenous and non-Indigenous peoples arising from colonization. Second, we should reject a "Canada first" agenda that makes economic self-interest a priority in global health. Third, we need to better leverage one of our greatest assets: diversity. Indigenous peoples alongside waves of French, English and other settlers form Canada's demographic mosaic. Fourth, Canada's global health work is far-reaching and advanced on many fronts, but at the expense of coordination, synergy and impact. The spirit of these calls to action fits with the messaging heard from the Trudeau government so far. The challenge now is for this government to walk its talk.

[Read More on The Star](#)





Letter From a Bed in Cape Town

A month ago my doctor told me to get into bed and stay there. My sudden, eye-popping back pain was a herniated spinal disc, he said, brought on by months of my artlessly lugging 25-liter plastic containers full of graywater weighing 55 pounds apiece around the house to flush toilets. If I wanted to walk normally again without surgery, I should lie flat for, well, he couldn't really say how long, until it got better. My spine is another casualty of Cape Town's now-famous drought. After three years of unusually low rainfall, life in many households now revolves around collecting and reusing water, because this city of some four-plus million people is on the verge of running out. If current projections hold, we'll hit the melodramatically named Day Zero, when the taps will be dry across most of the metro, sometime in early May, now adjusted to July. We're told that Cape Town will become the first major city in modern times to be almost completely without running water, which is really quite special.

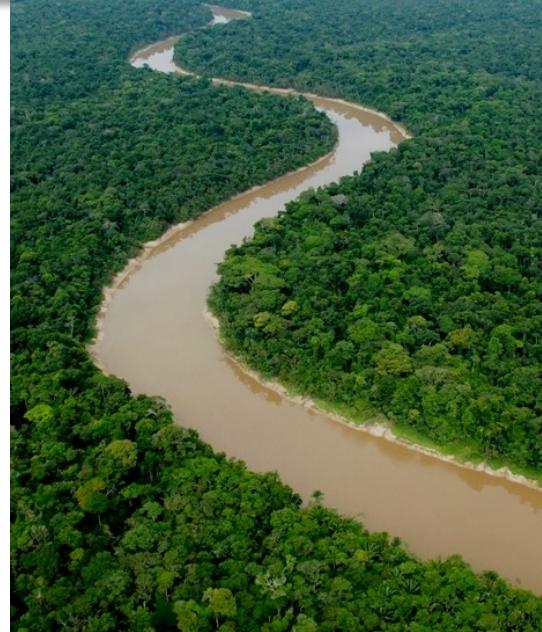
[Read More on Sierra Club](#)

[See Also: Counting Down to Day Zero](#)

Peru Moves to Protect One of the Last Great Intact Forests

While the United States may be weakening protections for wilderness, the creation of Yaguas National Park protects millions of acres from development and deforestation. The remote rain forests in Peru's northeast corner are vast, so vast that the clouds that form above them can influence rainfall in the western United States. The region contains species, especially unusual fish, that are unlike any found elsewhere on Earth. Scientists studying the area's fauna and flora may gain insights into evolutionary processes and into the ecological health and geological history of the Amazon. Now the area has become home to one of the Western Hemisphere's newest national parks. Yaguas National Park will protect millions of acres of roadless wilderness, and the indigenous people who rely on it, from development and deforestation. "This is a place where the forest stretches to the horizon," said Corine Vriesendorp, a conservation ecologist at The Field Museum in Chicago, one of many organizations that worked to win the national park designation, Peru's highest level of protection. "This is one of the last great intact forests on the globe."

[Read More on the New York Times](#)



These Are the Most Toxic Places on Earth

Over the last 100 years or so, humanity has made astounding technological advances at an overwhelming pace. These advances in science and technology may have made our lives easier and more exciting, but the trail of waste we have left (and still continue to leave) behind is simply horrendous. Pollutants of all kinds – chemical, nuclear, basic garbage, electronic waste – have seriously ruined our environment. Many locations have been so drastically impacted that living in them is a near impossibility. Chernobyl, Ukraine is a great example, the town witnessed the worst nuclear power plant accident in human history and since then has been an uninhabitable ghost town. Although this list doesn't feature any locations in the United States, they do exist. There are a number of sites that have been declared extremely toxic such as Love Canal, New York, Tar Creek, Oklahoma, and Gowanus Canal, New York. A recent case for alarm is a practice called Hydraulic Fracturing, or Fracking, which is a perfect example of modern day methods that have been linked to pollution of water and air. Mountaintop Removal is another controversial practice that is known to tarnish local water and wildlife. Along with the ten places mentioned in the video, here are other toxic places in the world that deserve an (dis)honorable mention: Linfen, China; The Great Pacific Garbage Patch; Rondonia, Brazil; Yamuna River; La Oroya, Peru; Lake Karachay, Russia; and, Space.

[Read More on The News Zoom](#)





Playing With Your Food: New Research on GMOs

Genetically engineered (GE) crops are taking over agribusiness. Insect-resistant corn acreage grew from 8 percent in 1997 to 19 percent to 2000 to 81 percent in 2015, according to the U.S. Department of Agriculture. A new study produced by researchers at the Institute of Life Sciences in Pisa, Italy and the University of Pisa looked at peer-reviewed studies on genetically engineered corn published over a span of 21 years to determine the effects of GE corn on agriculture and the environment. Researchers reviewed 6,006 studies, ultimately selecting 76 for inclusion. The studies were published between 1996 and 2016. The researchers compared GE corn with genetically similar non-GE crops, focusing on traits like yield, grain quality and effects on targeted organisms (such as pests). All GE crops studied were insect resistant, some were also herbicide resistant. The authors found GE crops had little to no effects on insect populations not targeted by the genetic alterations, "suggesting no substantial effect on insect community diversity." However, they indicate that pests might develop resistance to GE crops. They suggest a few strategies to delay this.

[Read More on Journalist's Resource](#)

Toward Zero Hunger in Nepal

Achieving zero hunger by 2030 is possible only with collaborative efforts from development partners, private sector, civil society and other stakeholders. The government of Nepal is committed to achieving national development goals in line with the constitution, the current 14th Periodic Plan and UN Sustainable Development Goals (SDGs) by 2030. Nepal signed its commitment in 2015 to meet Sustainable Development Goals (SDGs) by 2030. The government is making effort to accomplish the targets of all 17 Sustainable Development Goals. More importantly, the SDG-2 is vital for Nepal because this is about ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture. The focus is on achieving "Zero Hunger by 2030." The constitution has guaranteed right to food and food sovereignty as fundamental rights of Nepali citizens. Article-36 of the constitution states: "Every citizen shall have right to food; every citizen shall have right to be safe from being in risk of life due to food scarcity; and every citizen shall have the right to food sovereignty in accordance with law." The national development programs and plans including 14th Periodic Plan have also embraced this spirit. Right to food is our national agenda.

[Read More on My Republica](#)



Philippines President Tells Men Not to Use Condoms as HIV Rate Soars 3000%

Between 2015 and 2016, the number of new HIV cases around the world decreased from 2.1 million to 1.8 million. Meanwhile, in the Philippines, the number rose from 9,264 new cases to 11,103 new cases from 2016 to 2017, a year-over-year increase that is just one example of a decade-long trend of increases, according to data from the country's health agency. One contributing factor, according to health experts, is the actions of President Rodrigo Duterte, who has discouraged condom use among men. He said last week that citizens should avoid using condoms because they are "not satisfying." Because HIV is a sexually transmitted disease, condom use and safe sex practices can help prevent its spread. Conde and HIV activists have encouraged Duterte to promote condom use as one method of decreasing new HIV cases in the country.

[Read More on Global Citizen](#)

PLANETARY HEALTH WEEKLY



Climate Change Just Got a Little Less Terrible

There are some 20,000 research papers listed on Google Scholar, a search engine for academics, that mention the worst-case scenario for climate change, one where an overpopulated, technology-poor world digs up all the coal it can find. Basically, it's the most cataclysmic estimate of global warming. This scenario is important to scientists. It focuses minds on the unthinkable and how to avoid it. According to a provocative new analysis from the University of British Columbia, it's also wrong. This is good news. The researchers contend that current goals of reducing coal, oil and gas consumption may be closer than we think, thus allowing us to set the bar even higher in our efforts to reduce pollution. The bad news is that this is good news in the way a destabilizing climate-shift is preferable to planetary extinction: We are still in a lot of trouble. Nevertheless, if the study is verified by other scientists and catches a wave into the realm of policy makers, it could help accelerate initiatives to arrest global warming. The new work, in *Environmental Research Letters*, shows just how much all that phantom coal may be distorting our picture of what the future may look like. [Read More on Bloomberg](#)

SPOTLIGHT ON POLICY: South Australia's Renewable Star

Continues to Rise With Solar and Storage Blitz

It's been difficult to keep up with South Australia's renewable energy plans this week, with ambitious renewable and storage targets announced, renewable energy microgrids, hydro power plans, a new initiative to green the gas networks with hydrogen, and now a massive interest-free solar and battery program. The South Australia Labor Party has continued its renewable election blitz with a plan to offer interest-free loans of up to \$10,000 for solar and battery installations, and early reactions estimate it could see the battery market in the state soar by 300 per cent. The \$100 million scheme will see all South Australian households eligible for up to \$10,000 for solar and/or battery systems, with no interest charged on the loan for the first seven years. Locally made products will be given preference, which could be a boon for Adelaide-based Tindo Solar, Australia's only solar manufacturer. Energy minister Tom Koutsantonis said the scheme would help to meet the 75 per cent renewable and 25 per cent storage target set for 2025, while lowering household bills.

[Read More on The Fifth Estate](#)



SPOTLIGHT ON INDIGENOUS HEALTH: The Myth of the Wheat King and the Killing of Colten Boushie

While there are many who deny this, the killing of Colten Boushie, and the subsequent verdict acquitting Gerald Stanley of murder and manslaughter charges, has been guided by the deeply sowed force of this history. We will never forget this. In the wake of the verdict, it has been dehumanizing for many Indigenous people that we are at the point of debating whether property is more important than life, whether being a stranger on someone's property is an invitation to pull a gun, to shoot. It is clear that Colten Boushie, despite breaking no law, was never provided the presumption of innocence before guilt that Gerald Stanley was given in his trial. The mix of being a stranger on someone else's property, intoxicated and Indigenous were lethal to Colten's life, and most likely fatal to justice afterwards. While many are decrying that Colten's indigeneity had nothing to do with his death, such a view dangerously ignores the century plus of evidence planted in the imagination of the prairie settler, one materially aided by law. Once planted, it has created a dangerous licence that continues to have devastating effects on Indigenous peoples. It is the licence that allows us to be followed in stores when shopping, to be believed the sole authors of our experienced misfortunes even when it is violent, to be scoffed at in our claims of very obvious racism, as some reading this may be doing right now. [Read More on The Conversation](#)



QUOTE OF THE WEEK

How the climate affects your health. Doctors in Florida are warning about the risks of the changing climate on public health, forming a group called Florida Clinicians for Climate Action. "Heat worsens asthma, heart and lung disorders and even mental illnesses. Rising seas push floodwater polluted by leaky sewage pipes into neighborhoods. A changing climate helps spread mosquito-bourne diseases (think Zika), and research shows it makes hurricanes stronger and more common", the Miami Herald reports. "And who's most vulnerable? The same people that always are, doctors say: low income populations, the elderly and people of color."

[Read More on Miami Herald](#)

FCCA

EVENTS TABLE

Florida Clinicians for Climate Action

DATE	CONFERENCE	LOCATION	REGISTER
March 9	Webinar Series: Preparing Your Article and Submitting to a Journal	12:00-1:30 p.m. GMT	http://www.healthsystemsglobal.org/webinars/34/Preparing-your-article-and-submitting-to-a-journal.html
March 16-18	2018 CUGH Conference	New York USA	www.CUGH2018.org
April 20-22	BioVision Alexandria 2018	Alexandria Egypt	http://www.bibalex.org/bva2018/home/StaticPage.aspx?page=69
May 25-27	Bethune Round Table: The Role of the Trainee in Global Surgery	Toronto Canada	https://bethuneroundtable.com/
May 29-31	Planetary Health Alliance Annual Meeting	Edinburg Scotland	https://planetaryhealthalliance.org/annual-meeting
June	McGill University Summer Institutes in Infectious Diseases and Global Health	Montreal Canada	http://mcgill-idgh.ca/courses/tuberculosis-research-methods/
Oct 8-12	5th Global Symposium on Health Systems Research	Liverpool England	http://healthsystemsresearch.org/hsr2018/



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NEW REPORT— HONEST ACCOUNTS 2017: HOW THE WORLD PROFITS FROM AFRICA'S WEALTH



Much more wealth is leaving the world's most impoverished continent than is entering it, according to new research into total financial flows into and out of Africa. The study finds that African countries receive \$161.6 billion in resources such as loans, remittances and aid each year, but lose \$203 billion through factors including tax avoidance, debt payments and resource extraction, creating an annual net financial deficit of over \$40 billion.

The research shows that according to the most recent figures available in 2015:

- African countries received around \$19 billion in aid but over three times that much (\$68 billion) was taken out in capital flight, mainly by multinational companies deliberately misreporting the value of their imports or exports to recuse tax.
- African governments received \$32.8 billion in loans but paid \$18 billion in debt interest and principal payments, with the overall level of debt rising rapidly.
- An estimated \$29 billion a year was stolen from Africa in illegal logging, fishing and the trade in wildlife and plants.

[Read More on Global Justice](#)

[See Also: We Want Our Back Pay!- Grange Adamant That Jamaica Entitled to Reparations From British, Not Into Tit-For-Tat](#)



HOW AUSTRALIA ALL BUT ENDED GUN VIOLENCE



Suicide "is commonly an impulsive act by a vulnerable individual," explain E. Michael Lewiecki and Sara A. Miller in the *American Journal of Public Health*. "The impulsivity of suicide provides opportunities to reduce the risk of suicide by restricting access to lethal means." Which brings us back to the here and now. In 2015, an unthinkable 22,103 Americans shot themselves to death with a gun, accounting for just over half of the suicides in Australia that year. It isn't hard to imagine what would happen without all those guns at the ready. In a world of raging hypotheticals, we actually have some good, hard answers for this. All we have to do is look down under. There are millions of American families begging us to do it.

On April 28, 1996, a 28-year-old man named Martin Bryant drove his yellow Volvo to a popular tourist spot in Port Arthur, Australia, a former penal colony on the island state of Tasmania, and opened fire with a semi-automatic weapon. Before the day was through, he had shot dead 35 people and wounded 18 others. Twelve of those deaths came at the Broad Arrow Café, where Bryant first ate lunch and then sprayed bullets with his Colt AR-15 SP1, which he had stowed in a tennis bag. At the gift shop next door, he murdered eight more people. Later, he shot a young mother running away with her two children, all three at close range.

Within just weeks of that tragedy, elected officials in each of Australia's six states and two mainland territories, pressed forward by police chiefs across the continent and by the then-newly elected prime minister, banned semi-automatic and other military-style weapons across the country. The federal government of Australia prohibited their import, and lawmakers introduced a generous nationwide gun buyback program, funded with a Medicare tax, to encourage Australians to freely give up their assault-style weapons. Amazingly, many of them did.

A land of roughneck pioneers and outback settlers, Australia had never embraced much government regulation and certainly not about their guns. This was a land of almost cartoonish toughness and self-reliance, home of Crocodile Dundee and Australian rules football. Here even the kangaroos box. But Port Arthur had followed too many prior deadly shooting sprees and Australians were clearly sick to death of them. So what happened after the assault-weapon ban? Well therein lies the other half of the story twist noted above: *Nothing*. Australian independence didn't end. Tyranny didn't come. Australians still hunted and explored and big-wave surfed to their hearts' content. Their economy didn't crash; Invaders never arrived. Violence, in many forms, went down across the country, not up. Somehow, lawmakers on either side of the gun debate managed to get along and legislate. As for mass killings, there were no more. Not one in the past 22 years. [Read More on The Fortune](#)



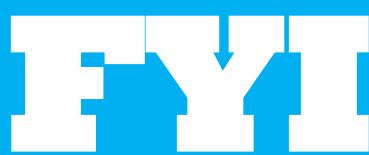
IF YOU LIVE IN FLORIDA, DOCTORS SAY CLIMATE CHANGE IS ALREADY AFFECTING YOUR HEALTH



When most people think about climate change, if they do at all, what usually comes to mind is melting glaciers, starving polar bears and flood waters lapping at the doors of Miami Beach condo buildings. But doctors in Florida say the changing climate is a public health risk, one they already see evidence of in their waiting rooms right now. Now, some clinicians have formed a new group to sound the alarm. They want to educate people and policymakers about the dangers of a hotter, more humid world, and the risks to their most vulnerable patients, patients like the one Dr. Cheryl Holder, president of the Florida State Medical Association, met one suffocating-ly hot Miami summer day.

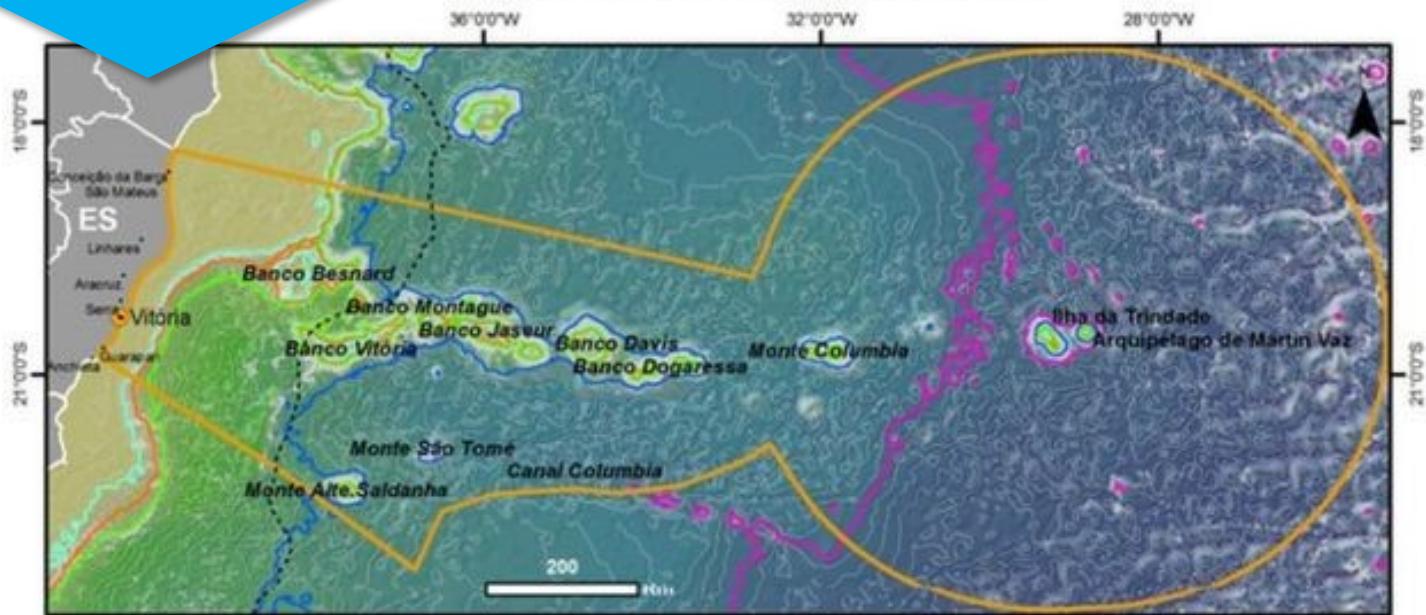
Doctors across the state are worried too, and some have banded together to form Florida Clinicians for Climate Action. The group is so new it doesn't have a leadership structure or a set agenda yet, but members said they want to make sure people know how climate change is already affecting public health. Heat worsens asthma, heart and lung disorders and even mental illnesses. Rising seas push floodwater polluted by leaky sewage pipes into neighborhoods. A changing climate helps spread mosquito-borne diseases (think Zika), and research shows it makes hurricanes stronger and more common. And who's most vulnerable? The same people that always are, doctors say: low-income populations, the elderly and people of color.

The same group that's already underinsured, overexposed to risk and financially unequipped to deal with it isn't prepared for a far-reaching issue like climate change, he said. That's where clinicians want to come in. They want to make sure everyone knows about the impacts of climate change and how to protect themselves, all the way from making sure high school coaches know how to teach their athletes the warning signs of heat exhaustion to explaining the benefit of community cooling centers in low-income neighborhoods to politicians. Florida Clinicians on Climate Action was officially formed last month, said Dr. Mona Sarfaty, director of the Medical Society Consortium on Climate and Health. One of the group's goals, she said, was to bridge the gap between Floridians who know climate change is happening (70 percent) and those who think it will affect them personally (41 percent). Clinicians are just the ones to do it, she said. They have access to patients throughout their lives, and polls show that nurses, doctors and pharmacists consistently top lists of most trustworthy professions. [Read More on Miami Herald](#)



THE UNKNOWN MOUNTAIN RANGE ON THE BRAZILIAN COAST THAT MAY BECOME THE LARGEST MARINE RESERVE IN THE ATLANTIC

MAPA BATIMÉTRICO REGIONAL



Owner of the largest variety of species living on reefs among all Brazilian islands, the chain is composed of about 30 submarine mountains of volcanic origin between the city of Vitória and the island of Trindade, 1,200 km from the continent. In an interview with the BBC Brasil, the Secretary of Biodiversity of the Ministry of the Environment, José Pedro de Oliveira Costa, said that in the next 45 days the organ will hand over to President Michel Temer a decree for the creation of a conservation unit around the mountain range and another reserve in the São Pedro and São Paulo archipelago, further north. "From there, it just depends on the president."

According to Costa, the reserve in the Vitória-Trindade chain would have about 450,000 square kilometers - an area equivalent to that of Sweden. The study that supports the proposal says that it would be the largest protected marine area of the Atlantic. On Wednesday, the federal government convened public consultations to discuss the creation of the units. The protection of the mountain range is an old demand of researchers, who consider it essential for the maintenance of fish stocks in neighboring waters and one of the best natural laboratories in the world. The chain gained global visibility in August 2017, when a study based on the formation of its fauna was covered by the prestigious scientific journal *Nature*.

For many years researchers have been trying to reach the cold waters of the mountain range, but the distance between the coast and the deepest submerged hills makes the mission complex. Navy ships usually take three days to reach Trindade, where Brazil maintains a military base. And to dive to the depths safely, you need expensive equipment. This time, the mission will be facilitated by Paratii 2, a sailboat given to the researchers through a partnership and able to spend three months at sea without refueling. Scientists will also carry *rebreathers*, devices that recycle the exhaled carbon dioxide, allowing the diver to spend up to six hours underwater.

The link between the mountain range and the mainland, says Pinheiro, is what makes the Brazilian formation unique in the world. There are other mountain ranges of volcanic origin in the middle of the ocean, such as Hawaii. But because they are far from the continent, the movement of species in these areas is limited.

[Read More on BBC Brazil](#)



NEW 28-HOUR WORKWEEK IN GERMANY IS GREAT FOR THE ENVIRONMENT



An estimated 2.3 million Germans are eligible for a 28-hour work week next year after their union, industrial union IG Metall, won concessions from major employers throughout the country. The deal covers metal and engineering workers who will be able to take 28-hour work weeks for up to two years. However, the change could be the beginning of a much longer-term and broader victory for workers throughout the country, as unions take advantage of low unemployment and stable economic growth.

Further, as efficiency and automation accelerate throughout Germany, shorter work weeks could be a solution to future job insecurity and job deficits, CNN notes. "You can expect similar deals to come in other sectors and regions soon," Famke Krumbmüller, a partner at OpenCitiz, a political risk consultancy, told CNN. All the workers eligible for this benefit are probably sighing with relief as they approach a better work-life balance. But they're not the only ones who will benefit from a less stressful existence. So will the Earth.

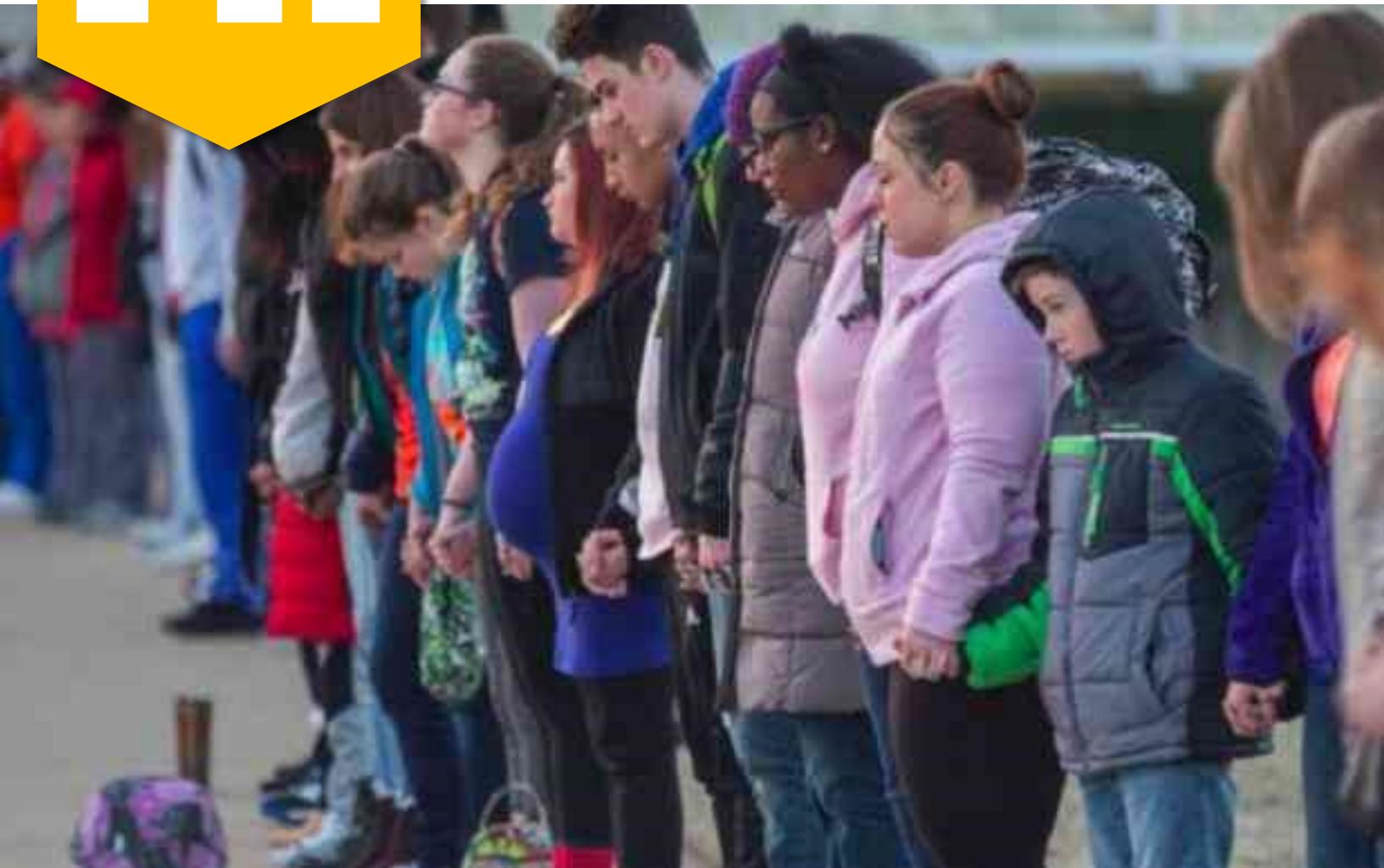
That's because shorter work weeks put less strain on the environment. If similar working conditions were adopted globally, then major environmental challenges like climate change could be mitigated, according to the Center for Economic and Policy Research. Conventional working conditions are inefficient and harmful to the planet in multiple ways. First, they force people to commute long distances every day, which leads to enormous greenhouse gas emissions. US citizens alone spend 30 billion hours a year going to and from work, and most of them are driving gas-powered vehicles. All across the world, cities and countries are deciding to phase out cars to reduce air pollution and mitigate climate change.

Another reason why standard work weeks are inefficient is because workplaces consume huge amounts of energy for lights, computers, air conditioning, heating, and more. One easy way to limit car use is to reduce the work week.

All throughout the world, the majority of electricity is supplied through fossil fuels, which generate greenhouse gas emissions and drive climate change. Reducing work weeks by 10% could simultaneously reduce carbon emissions by 15%, according to the sociologist Juliet Shor. There would be cost-savings as well. [Read More on Global Citizen](#)



SCHOOL SHOOTINGS: IMPACTS ON STUDENT ACHIEVEMENT, ENROLLMENT



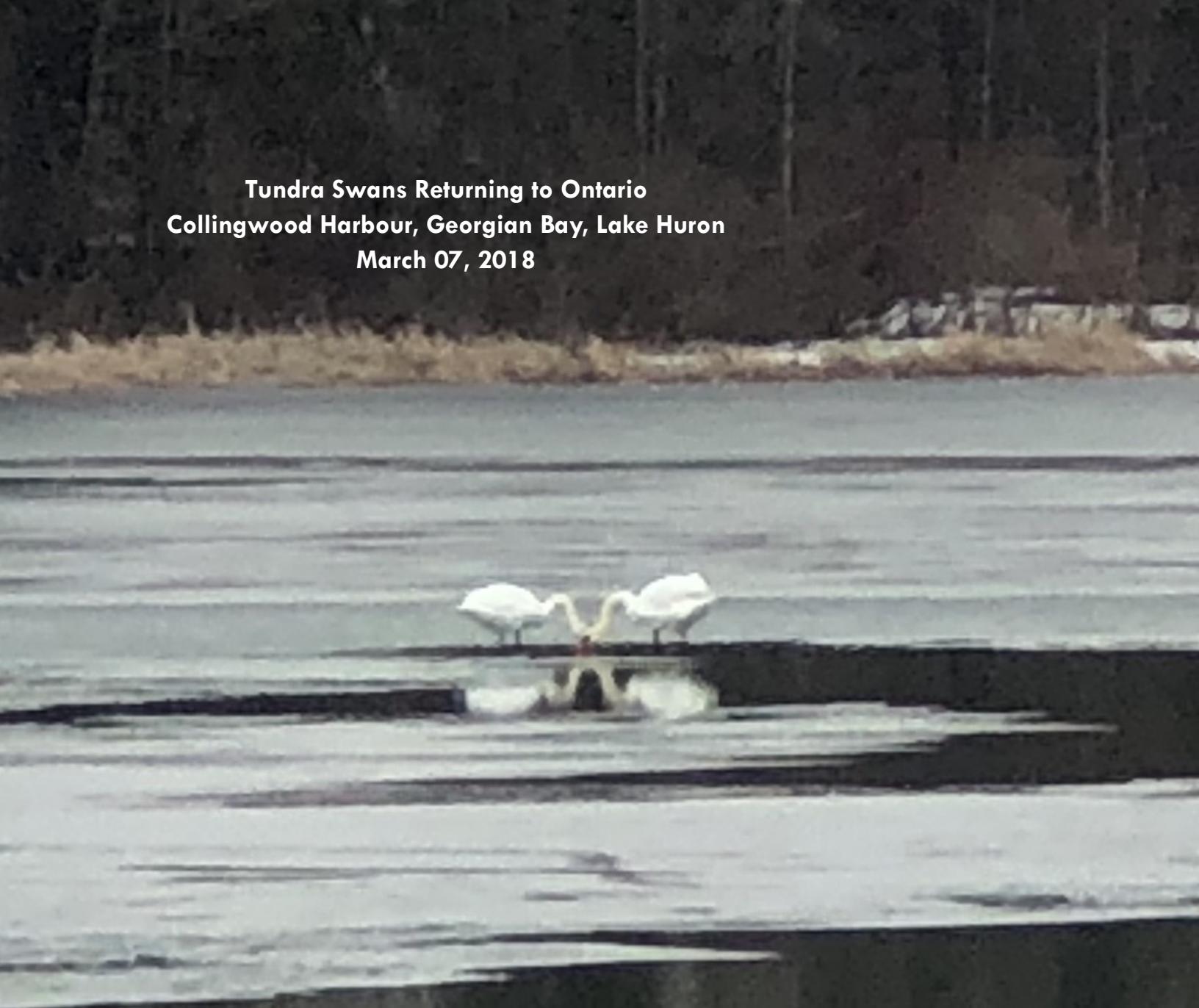
Before the end of February 2018, dozens of students were killed or injured in school shootings in Kentucky and Florida. The previous year, fatal shootings rocked campuses in Ohio, New Mexico, California and other states.

As reporters rush to collect facts, they also try to put these events into context, focusing, for example, on questions about gun policies and how local communities are grappling with the sudden deaths of children, teachers and coaches.

In the link below, there are research reports that look at other impacts that might seem less obvious to reporters covering the issue. These studies offer insights into how student performance and school enrollments may change following a shooting. They also have included resources aimed at helping journalists improve their coverage of school shootings, including tips on interviewing children and an explainer on firearm technology and vocabulary.

[**Read More on The Journalist's Resource**](#)

Tundra Swans Returning to Ontario
Collingwood Harbour, Georgian Bay, Lake Huron
March 07, 2018



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CONTACT US



@PlanetaryWeekly



@PlanetaryHealthWeekly



planetaryhealthweekly@gmail.com



Planetary Health Weekly

Publisher and Editor: **Dr. David Zakus**
dzakus@ryerson.ca

Production: **Angeline Sahayanathan & Shalini Kainth**



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