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A Year Without Travel

For Planet Earth, No Tourism is a Curse and a Blessing

From the rise in poaching to the waning of noise pollution, travel's shutdown is having profound effects. Which will remain, and which will vanish?

By Lisa W. Foderaro

For the planet, the year without tourists was a curse and a blessing.

With flights canceled, cruise ships mothballed and vacations largely scrapped, carbon emissions plummeted. Wildlife that usually kept a low profile amid a crush of tourists in vacation hot spots suddenly emerged. And a lack of cruise ships in places like Alaska meant that humpback whales could hear each other's calls without the din of engines.

That's the good news. On the flip side, the disappearance of travelers wreaked its own strange havoc, not only on those who make their living in the tourism industry, but on wildlife itself, especially in developing countries. Many governments pay for conservation and enforcement through fees associated with tourism. As that revenue dried up, budgets were cut, resulting in increased poaching and illegal fishing in some areas. Illicit logging rose too, presenting a double-whammy for the environment. Because trees absorb and store carbon, cutting them down not only hurt wildlife habitats, but contributed to climate change.

"We have seen many financial hits to the protection of nature," said Joe Walston, executive vice president of global conservation at the Wildlife Conservation Society. "But even where that hasn't happened, in a lot of places people haven't been able to get into the field to do their jobs because of Covid."

From the rise in rhino poaching in Botswana to the waning of noise pollution in Alaska, the lack of tourism has had a profound effect around the world. The question moving forward is which impacts will remain, and which will vanish, in the recovery.

A change in the air

While the pandemic's impact on wildlife has varied widely from continent to continent, and country to country, its effect on air quality was felt more broadly.

In the United States, greenhouse gas emissions last year fell more than 10 percent, as state and local governments imposed lockdowns and people stayed home, according to a report in January by the Rhodium Group, a research and consulting firm.

The most dramatic results came from the transportation sector, which posted a 14.7 percent decrease. It's impossible to tease out how much of that drop is from lost tourism versus business travel. And there is every expectation that as the pandemic loosens its grip, tourism will resume — likely with a vengeance.

Still, the pandemic helped push American emissions below 1990 levels for the first time. Globally, carbon dioxide emissions fell 7 percent, or 2.6 billion metric tons, according to new data from international climate researchers. In terms of output, that is about double the annual emissions of Japan.

"It's a lot and it's a little," said Jason Smerdon, a climate scientist at Columbia University's Lamont-Doherty Earth Observatory. "Historically, it's a lot. It's the largest single reduction percent-wise over the last 100 years. But when you think about the 7 percent in the context of what we need to do to mitigate climate change, it's a little."

Editors' Picks

In late 2019, the United Nations Environment Program cautioned that global greenhouse gases would need to drop 7.6 percent every year between 2020 and 2030. That would keep the world on its trajectory of meeting the temperature goals set under the Paris Agreement, the 2016 accord signed by nearly 200 nations.

"The 7 percent drop last year is on par with what we would need to do year after year," Dr. Smerdon said. "Of course we wouldn't want to do it the same way. A global pandemic and locking ourselves in our apartments is not the way to go about this."

Interestingly, the drop in other types of air pollution during the pandemic muddied the climate picture. Industrial aerosols, made up of soot, sulfates, nitrates and mineral dust, reflect sunlight back into space, thus cooling the planet. While their reduction was good for respiratory health, it had the effect of offsetting some of the climate benefits of cascading carbon emissions.

For the climate activist Bill McKibben, one of the first to sound the alarm about global warming in his 1989 book, "The End of Nature," the pandemic underscored that the climate crisis won't be averted one plane ride or gallon of gas at a time.

"We've come through this pandemic year when our lives changed more than any of us imagined they ever would," Mr. McKibben said during a Zoom webinar hosted in February by the nonprofit Green Mountain Club of Vermont.

"Everybody stopped flying; everybody stopped commuting," he added. "Everybody just stayed at home. And emissions did go down, but they didn't go down that much, maybe 10 percent with that incredible shift in our lifestyles. It means that most of the damage is located in the guts of

our systems and we need to reach in and rip out the coal and gas and oil and stick in the efficiency, conservation and sun and wind."

Wildlife regroups

Just as the impact of the pandemic on air quality is peppered with caveats, so too is its influence on wildlife.

Animals slithered, crawled and stomped out of hiding across the globe, sometimes in farcical fashion. Last spring, a herd of Great Orme Kashmiri goats was spotted ambling through empty streets in Llandudno, a coastal town in northern Wales. And hundreds of monkeys — normally fed by tourists — were involved in a disturbing brawl outside of Bangkok, apparently fighting over food scraps.

In meaningful ways, however, the pandemic revealed that wildlife will regroup if given the chance. In Thailand, where tourism plummeted after authorities banned international flights, leatherback turtles laid their eggs on the usually mobbed Phuket Beach. It was the first time nests were seen there in years, as the endangered sea turtles, the largest in the world, prefer to nest in seclusion.

Similarly, in Koh Samui, Thailand's second largest island, hawksbill turtles took over beaches that in 2018 hosted nearly three million tourists. The hatchlings were documented emerging from their nests and furiously moving their flippers toward the sea.

For Petch Manopawitr, a marine conservation manager of the Wildlife Conservation Society Thailand, the sightings were proof that natural landscapes can recover quickly. "Both Ko Samui and Phuket have been overrun with tourists for so many years," he said in a phone interview. "Many people had written off the turtles and thought they would not return. After Covid, there is talk about sustainability and how it needs to be embedded in tourism, and not just a niche market but all kinds of tourism."

In addition to the sea turtles, elephants, leaf monkeys and dugongs (related to manatees) all made cameos in unlikely places in Thailand. "Dugongs are more visible because there is less boat traffic," Mr. Manopawitr said. "The area that we were surprised to see dugongs was the eastern province of Bangkok. We didn't know dugongs still existed there."

He and other conservationists believe that countries in the cross hairs of international tourism need to mitigate the myriad effects on the natural world, from plastic pollution to trampled parks.

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That message apparently reached the top levels of the Thai government. In September, the nation's natural resources and environment minister, Varawut Silpa-archa, said he planned to

shutter national parks in stages each year, from two to four months. The idea, he told Bloomberg News, is to set the stage so that "nature can rehabilitate itself."

An increase in poaching

In other parts of Asia and across Africa, the disappearance of tourists has had nearly the opposite result. With safari tours scuttled and enforcement budgets decimated, poachers have plied their nefarious trade with impunity. At the same time, hungry villagers have streamed into protected areas to hunt and fish.

There were reports of increased poaching of leopards and tigers in India, an uptick in the smuggling of falcons in Pakistan, and a surge in trafficking of rhino horns in South Africa and Botswana.

Jim Sano, the World Wildlife Fund's vice president for travel, tourism and conservation, said that in sub-Saharan Africa, the presence of tourists was a powerful deterrent. "It's not only the game guards," he said. "It's the travelers wandering around with the guides that are omnipresent in these game areas. If the guides see poachers with automatic weapons, they report it."

In the Republic of Congo, the Wildlife Conservation Society has noticed an increase in trapping and hunting in and around protected areas. Emma J. Stokes, regional director of the Central Africa program for the organization, said that in Nouabalé-Ndoki National Park, monkeys and forest antelopes were being targeted for bushmeat.

"It's more expensive and difficult to get food during the pandemic and there is a lot of wildlife up there," she said by phone. "We obviously want to deter people from hunting in the park, but we also have to understand what's driving that because it's more complex."

The Society and the Congolese government jointly manage the park, which spans 1,544 square miles of lowland rainforest — larger than Rhode Island. Because of the virus, the government imposed a national lockdown, halting public transportation. But the organization was able to arrange rides to markets since the park is considered an essential service. "We have also kept all 300 of our park staff employed," she added.

Largely absent: the whir of propellers, the hum of engines

While animals around the world were subject to rifles and snares during the pandemic, one thing was missing: noise. The whir of helicopters diminished as some air tours were suspended. And cruise ships from the Adriatic Sea to the Gulf of Mexico were largely absent. That meant marine mammals and fish had a break from the rumble of engines and propellers.

So did research scientists. Michelle Fournet is a marine ecologist who uses hydrophones (essentially aquatic microphones) to listen in on whales. Although the total number of cruise ships (a few hundred) pales in comparison to the total number of cargo ships (tens of thousands),

Dr. Fournet says they have an outsize role in creating underwater racket. That is especially true in Alaska, a magnet for tourists in search of natural splendor.

“Cargo ships are trying to make the most efficient run from point A to point B and they are going across open ocean where any animal they encounter, they encounter for a matter of hours,” she said. “But when you think about the concentration of cruise ships along coastal areas, especially in southeast Alaska, you basically have five months of near-constant vessel noise. We have a population of whales listening to them all the time.”

Man-made noise during the pandemic dissipated in the waters near the capital of Juneau, as well as in Glacier Bay National Park and Preserve. Dr. Fournet, a postdoctoral research associate at Cornell University, observed a threefold decrease in ambient noise in Glacier Bay between 2019 and 2020. “That’s a really big drop in noise,” she said, “and all of that is associated with the cessation of these cruise ships.”

Covid-19 opened a window onto whale sounds in Juneau as well. Last July, Dr. Fournet, who also directs the Sound Science Research Collective, a marine conservation nonprofit, had her team lower a hydrophone in the North Pass, a popular whale-watching destination. “In previous years,” she said, “you wouldn’t have been able to hear anything — just boats. This year we heard whales producing feeding calls, whales producing contact calls. We heard sound types that I have never heard before.”

Farther south in Puget Sound, near Seattle, whale-watching tours were down 75 percent last year. Tour operators like Jeff Friedman, owner of Maya’s Legacy Whale Watching, insist that their presence on the water benefits whales since the captains make recreational boaters aware of whale activity and radio them to slow down. Whale-watching companies also donate to conservation groups and report sightings to researchers.

“During the pandemic, there was a huge increase in the number of recreational boats out there,” said Mr. Friedman, who is also president of the Pacific Whale Watch Association. “It was similar to R.V.s. People decided to buy an R.V. or a boat. The majority of the time, boaters are not aware that the whales are present unless we let them know.”

Two years ago, in a move to protect Puget Sound’s tiny population of Southern Resident killer whales, which number just 75, Washington’s Gov. Jay Inslee signed a law reducing boat speeds to 7 knots within a half nautical mile of the whales and increasing a buffer zone around them, among other things.

Many cheered the protections. But environmental activists like Catherine W. Kilduff, a senior attorney in the oceans program at the Center for Biological Diversity, believe they did not go far enough. She wants the respite from noise that whales enjoyed during the pandemic to continue.

“The best tourism is whale-watching from shore,” she said.

Looking Ahead

Debates like this are likely to continue as the world emerges from the pandemic and leisure travel resumes. Already, conservationists and business leaders are sharing their visions for a more sustainable future.

Ed Bastian, Delta Air Lines' chief executive, last year laid out a plan to become carbon neutral by spending $1 billion over 10 years on an assortment of strategies. Only 2.5 percent of global carbon emissions are traced to aviation, but a 2019 study suggested that could triple by midcentury.

In the meantime, climate change activists are calling on the flying public to use their carbon budgets judiciously.

Tom L. Green, a senior climate policy adviser with the David Suzuki Foundation, an environmental organization in Canada, said tourists might consider booking a flight only once every few years, saving their carbon footprint (and money) for a special journey. "Instead of taking many short trips, we could occasionally go away for a month or more and really get to know a place," he said.

For Mr. Walston of the Wildlife Conservation Society, tourists would be wise to put more effort into booking their next resort or cruise, looking at the operator's commitment to sustainability.

"My hope is not that we stop traveling to some of these wonderful places, because they will continue to inspire us to conserve nature globally," he said. "But I would encourage anyone to do their homework. Spend as much time choosing a tour group or guide as a restaurant. The important thing is to build back the kind of tourism that supports nature."

Lisa W. Foderaro is a former reporter for The New York Times whose work has also appeared in National Geographic and Audubon Magazine.