

Can nature heal itself? What the pandemic has shown us

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A view of the Mopan River in Melchor de Mencos, Guatemala.

(CNN) In the dark early days of the coronavirus pandemic, when [a death toll of 1 million](#) was still unimaginable, there was one bright spot: nature appeared to be healing. With humans under lockdown, stories circulated about unusual animal sightings, like [wild goats taking over a town in Wales](#) -- and then became a joke about the public's thirst for signs of regeneration: New Yorkers claimed the return of Elmo to Times Square as proof of a great earthly rebalancing.

The idea of nature resurging offered relief from worries about the pandemic's human suffering, and hope for the planet: Was nature still capable of healing itself, if just given some alone time?

It's probably not that simple. Scientists could take years to establish the net impact of the great "[anthropause](#)," as some have dubbed it, on wildlife and the environment, but there are already signs of fallout. Lockdowns have put tourism, some scientific field research, and surveillance of some protected areas on pause. More poachers have come in their place, conservationists in Asia, Africa and the Americas tell CNN.



Mountain goats roam the streets of Llandudno, Wales, on March 31, 2020.

"We can't expect that nature just soldiers on," United Nations Environment Program Executive Director Inger Andersen told reporters on Tuesday, in response to a question about how to stem the world's ongoing loss of wildlife since the 1970s. Nearly [two-thirds of the world's wildlife](#) was wiped out in the past 50 years, according to a recent WWF report, and a new report by the Royal Botanic Gardens Kew shows that [some 40% of plants](#) are threatened by extinction. With land and seascapes already irrevocably altered, polluted, razed and planted, humans must figure out how to actively steward the health of

the environment and live in it sustainably, Andersen said -- precisely the challenge before world leaders at [the UN Summit on Biodiversity](#) on Wednesday and at the COP15 global biodiversity conference next year. In other words, it'll take more than a few months at home to heal the planet.

"There's more wildlife visiting inhabited areas. We've seen the penguins in Cape Town, the kangaroos jumping down the streets in Adelaide and so on. In those contexts it probably has given nature a bit of a break," says Conservation International's executive vice president Sebastian Troeng. Less international travel has also interrupted some illegal wildlife trade across borders, he adds, but "that's pretty much as far as any benefits go."

'Covid-19 has been a godsend to poachers



Poacher active in jaguar range in undisclosed location in South America during the COVID-19 pandemic. April 24, 2020

Fewer people around isn't always a good thing.

In Honduras, hidden cameras have captured a change in traffic across eight conservation parks this year. Monitored by global wild cat conservation group [Panthera](#), the cameras once recorded thousands of tourists, the group's South America Regional Director Esteban Payan says.

"For years, you wouldn't get one single cat there," he says. "Now there's no tourism, no tourists on these trails. And we start seeing margays, we start seeing ocelots, we start seeing pumas." But in some parks, Payan says, the cameras have also started to capture more hunters.

People who illegally hunt wild cats are often retaliating for attacks on cows or livestock, he says. And some are just armed wanderers. "With the lockdowns, many people are just walking in the forest and are walking with a gun -- and they'll see a jaguar and will kill it out of fear," he says.

Panthera and other organizations have working solutions to these problems. One project promotes electric fencing for ranchers to protect livestock from predator cats. But the coronavirus makes acting on them harder.

"We depend on funding," says Payan. The tattered global economy translates into less giving to NGOs from large and small donors alike, he says, which ultimately results in "less patrolling and less vigilance."

A continent away, in the Democratic Republic of Congo, the same problem plagues efforts to stop poachers who kill or capture exotic species to traffic on the black market. Adams Cassinga, head of Conserv Congo, [an anti-trafficking organization](#) that works with lawmakers to bring poachers and traffickers to justice, tells CNN that since the pandemic, he's seen fewer park rangers and security officers in protected areas.



These leopard skins were confiscated from poachers in the Democratic Republic of Congo during the pandemic.

His organization has assisted 11 wildlife trafficking busts in Kinshasa over the past five months, he says, more than double the number in the same period last year.

These involved a butcher's list of rare animal carcasses and parts: a half ton of pangolin scales, four great apes, one baboon, 60 kilograms of ivory and several monkeys. Some of the animals rescued alive, like baby chimpanzees, fetch up to \$50,000 on the international black market.

"Covid-19 has been a godsend to poachers," says Cassinga.

Tourism is [a central source of funding](#) for wildlife reserves and nature parks around the world. As CNN has previously reported, the presence of eco-tourists keep poachers and loggers at bay, and at well-managed reserves, their money funds rangers, park management and other programs to ensure the health of wildlife. When travel ground to a halt this year, that vital funding dried up.



A rescued baby chimp.

"Covid-19 has had a devastating impact on wildlife tourism, and on the functioning of parks and protected areas around the world," says Andersen, the UNEP executive director. "In many countries we've seen an almost 100% decline in tourism.

"The lesson for us is that if we are to save protected areas, we need to broaden our revenue streams" to go beyond tourism, she says.

Not all organizations interviewed by CNN had the same issues. Nonprofit African Parks, which manages 18 parks across the continent, said it had not observed an overall increase in poaching. Chief marketing officer Andrea Heydlauff chalked that to the fact that the organization does not rely heavily on tourism and did not cut staff during the pandemic.

'I'm not proud of it and even wish I wouldn't have done it'

What motivates a poacher? For some, it's just survival. Several conservation organizations have warned that human poverty is one of the greatest dangers to wildlife this year.

The pandemic may have emboldened established criminals and traffickers, but it has also driven [hundreds of millions of jobless people](#) worldwide into a desperate state of poverty, raising the risk of a

famine "of biblical proportions," to quote a statement by the UN's David Beasley, executive director of the [World Food Program](#).

Tourism is a central source of income in Guatemala's [Maya Biosphere Reserve](#), a vast swath of tropical forest that encompasses ancient archaeological sites, national parks and wildlife reserves. One man from Cruce Dos Aguadas village there said he turned to poaching to feed his family after tourism work stopped.

He has been hunting the shrinking number of Yucatan brown brocket, a small species of deer considered "vulnerable" by the International Union for Conservation of Nature (IUNC), as well as "near threatened" ocellated turkeys, feathered in iridescent blue and copper.

"I'm not proud of it and even wish I wouldn't have done it, but what else would I do?" he told CNN. "Before the pandemic, we could rely on tourism or the work in archaeological sites to earn money and buy food with. But now, we have nothing."



The brown brocket at Mexico's Centenario Zoo in Merida, Yucatan.

Even before the pandemic, people in rural areas around the world supplemented sparse diets by [hunting wild animals](#), or bushmeat. But economic pressure has forced many to hunt more for survival. Experts say it has also led to more illegal logging, harvesting and grazing in protected lands.

In Uganda's Bwindi Impenetrable National Park, an extremely rare [silverback mountain gorilla](#) was killed this June, the first such killing the park had seen in nine years. One of just over 1,000 remaining in the world, the gorilla -- known locally as Rafiki -- had run into bushmeat poachers who were likely looking for smaller prey.

Veterinarian Gladys Kalema-Zikusoka, founder of Uganda-based non-profit [Conservation Through Public Health](#) (CTPH) which works in the park, says that without tourism, the share of park revenue dedicated to supporting basic local infrastructure has dried up, and people living in the area have no "other options but to turn to illegal activity to meet the basic needs of food and fuel wood for their families," Kalema-Zikusoka said.



A general view shows habitations near Bwindi Impenetrable National Park in Uganda in 2014.

"For the most part, communities surrounding Uganda's protected areas, conservancies and important wildlife areas are some of the poorest and most marginalized," she says.

The number of people accused of poaching more than doubled in Uganda in the early months of the pandemic. Uganda's Wildlife Authority (UWA) recorded 531 poaching suspects between February and May of this year, compared to 255 in the same period the year before. UWA executive director Sam Mwandha said poaching has since slowed to "normal" levels.

Heading toward Kunming 2021



World leaders addressed the UN Biodiversity Summit virtually at the UN headquarters in New York on Wednesday.

Conservationists fear the global push to revive faltering economies will do more damage to the environment. Government stimulus to create jobs and growth could be directed to green initiatives, but early signs are not entirely promising: CNN has previously reported that several wealthy

governments are already pouring relief money into [polluting fossil fuel industries](#), and [Conservation International](#) has tracked more than 20 rollbacks in [environmental protections](#) globally this year.

Rebooting the global economy has to combine "putting food on the table" with directing "resources towards nature-positive actions that will guarantee us a secure future," UNEP's Andersen says. For people living near nature, upticks in poaching suggest a need for more resilient "wildlife economies" with less dependence on tourism, she says. Andersen also stresses the need to look beyond protected areas to cities and rural areas, where environmental problems abound. "We must look at biodiversity beyond protected areas, because this is where the loss is most severe."

Currently about [15% of global land](#) and [7% of waters](#) are protected, according to the UN's database of protected areas. The goal set a decade ago by global representatives in Aichi, Japan, was 17% for land and 10% for waters by 2020 (still lower than scientists' 30% target for both).

At next year's Convention on Biodiversity in Kunming, China, 196 countries are hoped to set new biodiversity goals for themselves -- and actually achieve them this time.

To build momentum toward that, several countries including Canada, the UK and EU vowed this week to expand protected natural areas, and more than 70 countries signed [a 10-point pledge](#) to prioritize the environment in post-pandemic reconstruction. Notably missing from the list of pledge signatories, however, were China, India, the US, and Brazil.

A 'once in a lifetime experiment'



Male largemouth bass guarding fry in Lake Opinicon, 2016.

The pandemic offers scientists a dramatic opportunity to drive home the need for such commitments.

Though a tragedy, the pandemic is "this once in a lifetime event" to evaluate the effects of our behavior on nature, says Richard Primack, a biologist at Boston University, who is working with scientists globally [to compile research about Covid-19's impact on conservation](#), for the journal *Biological Conservation*. "We going to see these [enormous changes in human activity](#)."

A major question, says Primack, is whether the ways in which humans try to protect nature actually work. "Maybe (the data) will tell us that the management we have is not important, if biological systems are really staying the same. Or maybe it's telling us that the management is critical."

One colleague of Primack's sees early evidence to support scaling up protection. [David Philipp](#), an avid angler and conservation biologist at the Fisheries Conservation Foundation, has been studying bass populations in the lakes and rivers of southern Ontario for 30 years. For decades, he

says, sport fishing caused a disastrous annual depletion of baby bass, by disrupting father fish as they guarded their nests from predators. But between 2019 and 2020, the number of surviving baby bass in Philipp's research zone more than tripled, from 124,000 to 414,000, a change that he attributes to a halt on fishing due to pandemic lockdowns and the US-Canada border closure. This year's surviving fry could live as long as 15 years, theoretically rejuvenating the population for years.

His research, which is still under review, could be a decisive piece of Philipp's pitch to the Canadian government for a pilot project that would effectively replicate lockdown's benefits, by blocking off nesting areas in lakes from fishing for a few months each year.

- Lockdowns have "given people a glimpse of how quickly things can improve if we take action," Andersen says. Though sightings of flora and fauna thriving during mankind's confinement may not tell the whole story, she hopes they will inspire the public to reconnect with nature and demand more environmental protections in the future.

Primack, the biologist, has wondered whether in some cases, the animals spotted during the pandemic had been visiting urban spaces all along. "People might have been just rushing around too much to notice them before," he says. Only long-term studies will eventually show whether wildlife in some areas really did take advantage of the sudden quiet to explore, or whether we just began to see things differently.