

Lockdowns offer a lesson in humans' impact on wildlife and biodiversity

By Jacqueline Barba on 05.19.20 Word Count **1,437** Level **MAX**



Sea lions sunbathe in the street in Mar del Plata harbor, Argentina, during the lockdown imposed due to the COVID-19 coronavirus pandemic. Photo by Mara Sosti/AFP via Getty Images

Wild mountain goats wandered into a town square in Wales. An alligator crawled through a shopping center in South Carolina. Fin whales swam unusually close to shore off the coast of southern France, and in Argentina, sea lions sunbathed in the streets of a harbor town.

An estimated one-third of the world's population is now staying home in an effort to slow the spread of the COVID-19 virus. With so many people indoors, some wild species are taking advantage of a rare opportunity. They are venturing beyond their usual territory, into spaces that were once crowded with humans. News stories and social media posts have excitedly reported sightings of creatures big and small — from birds, foxes and deer to coyotes, bears and wild boar.

Noise And Light Usually Keep Animals Away

Katie Wood is not surprised to see animals exploring beyond their familiar borders. Wood is a marine biologist. She works at the Earth Day Network, an environmental nonprofit, where she is the conservation and biodiversity programs manager.

"When humans are not isolated to their homes, we tend to take up quite a bit of room," says Wood. "We like to go hiking, we like to be quite loud in our cities, we like to go to the beaches. We're everywhere." This impacts wildlife habitats.

Now that so many humans are staying home, "wildlife is just doing what wildlife does," says Wood. Animals are taking careful, curious steps toward reoccupying those now-empty spaces.

How do animals know it's safe to wander into towns and swim closer to shore? Normally, humans create a lot of noise and artificial light. Our streetlights and car headlights brighten the natural dark of nighttime. Our vehicles — cars, trucks, buses and trains on land, giant ships in the sea, and planes in the air — make loud sounds. All of this activity sends a message to animals: "Stay away!"

In many cases, this stimuli actually harms animals. It prevents them from seeing and hearing properly, and pushes them out of their natural habitats. Light and noise pollution have negative effects on a great number of species. Bright city lights disorient baby sea turtles, making it harder for them to find a safe path into the ocean after hatching. Birds that rely on moonlight and starlight for migration can be confused and led off path by artificial lights. Studies have shown that ship traffic and deep-sea drilling produce ocean noise that travels all the way down to the seafloor. It can drown out the communication sounds that whales, dolphins and other marine animals rely on for survival.

Animals take things day by day, Wood says. Their main goal is to survive and reproduce. When human noise and light are shut off, even temporarily, animals see it as an opportunity. It's a chance to explore new ground and possibly find new resources to help with their survival.

"That's their natural instinct, and we're seeing them use their instincts to take advantage of this situation." Wood says. "It shows the resiliency of wildlife."

Thinking About The Space We Take Up

Wood hopes the sightings will send a message to humans about the space we take up, and the space we leave for other living things.

"These animals are needing space," she says. "When you look around your neighborhood landscape, it's common to see the wild environment becoming increasingly sparse." This decrease in wild spaces leads to a decline in biodiversity.

Biodiversity is the variety of living things in a habitat or ecosystem. When natural habitat is reduced or removed, the number of living things — like plants, insects, reptiles, and mammals — is also reduced in that area. This decrease puts the ecosystem out of balance, Wood explains. It can lead to ecosystem decline and in some cases, species extinction.

The stay-at-home orders aren't necessarily helping to increase biodiversity or restore lost habitat. They are, however, giving us a rare view into the ways that human activity impacts the ranges and behaviors of animals that live at the edges of our towns and cities. We are seeing first-hand how they might explore and look for food if our actions didn't usually keep them away.

Turtle Nest Success In Thailand

The excitement around the recent wildlife sightings has prompted some to ask whether animals really are making more of an appearance than usual — or if the humans stuck at home simply have

more free time to notice and appreciate them.

Most likely, it's both, says Ellie Chesterton. She's a behavioral ecologist at the University of Leeds in England. When it comes to animals that people are spotting in their yards and gardens, like birds, raccoons and foxes, we may just be seeing all of the animal activity that goes on when we're away at school or work. But for other species, Chesterton says, there have been noticeable and sometimes even measurable shifts.

"In Japan for instance, there's a famous park called the Nara Park where tourists typically go and hand-feed the deer. So the deer rely heavily on human interaction to survive," Chesterton says. "But now that humans aren't going there, the deer are venturing out into the city specifically to look for other food sources."

Chesterton also points to an April report on leatherback sea turtle populations in Thailand. With drastically fewer tourists on the beaches, scientists have found a larger number of turtle nests than in any year in the past two decades. Leatherback sea turtles are endangered. They like to lay their eggs in a secluded spot, away from disruption. These quiet spots are hard to find in the busy tourist season.

Excitement About Sightings Is Not All Positive

Chesterton is encouraged by people's excitement about the appearance of wild animals in their towns and across social media. "With the lockdown, people are really valuing nature more in general," she says. People are taking more nature walks. They are listening to and looking out for the wildlife all around them.

There are some downsides to all of that excitement, though. "My concern is that people will encourage the behavior in animals because it's something that they're enjoying to see," Chesterton says. That could have a negative impact on some species in the long term. Generally, it's much safer for animals not to feel too comfortable around humans and not to depend on them for food (the way the Nara Park deer do).

In some cases, enthusiasm about animal sightings has led to misreporting. One well-known example was a widely shared video of dolphins said to be swimming in the suddenly empty canals of Venice, Italy. The footage was actually taken in waters hundreds of miles away.

Long-Term Changes Are Up To Us

Still, Wood, the marine biologist, thinks even mistakes like this say something encouraging about humans.

"We want to see that when we restrict the effects that we have on our ecosystems, species do come back. And when we do see really incredible things happening," she says — like the turtle recovery in Thailand — "we want more. We want to see wildlife do well."

It's too soon to tell whether restrictions on human activity will have lasting impacts on wildlife. Wood says it's up to us. "Now that we've seen the impact that we've had on our ecosystems and the lives of these critters that are reemerging, I wonder if we will go back to everything as it was before."

If you're interested in helping to protect and reclaim wild spaces for wildlife, Wood says, try working with your parents or caregivers to make it happen. You can section off a piece of your yard, or a community space, and try to keep it wild, she says. Avoid using pesticides, which are chemicals that kill insects and weeds. Grow only native plants. These are plants that naturally grow in the area. You can also create a pollinator garden. This will benefit pollinating insects like butterflies and bees.

Steps like these may sound small, Wood says. However, they can make a big impact for the wild creatures in your neighborhood.

Enjoy Animals, But From A Safe Distance

Chesterton hopes that when the coronavirus outbreak is over and the world returns to normal, people will remember the fascination they felt for the wild creatures during this time.

"I hope people start to value animals a little bit more," she says. "They have personalities."

Until then, Chesterton reminds anyone who's observing nearby wildlife to keep a safe distance. Never feed a wild animal. For as long as shelter-in-place lasts, Chesterton says, "enjoy them from a window."