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Urban Nocturnal Animals

The night is fascinating; it offers so much to be discovered. It is never-ending. Members of the human species have become alien to it. We've let ourselves be blinded by the darkness, and we're content with the idea that what we see is what there is; but appearances are deceiving and our fears stop us from seeing more. When we look closely, when we listen carefully, and above all, when we inquire more deeply, we find in the details the description of something new. We realize that the silence is full of sounds and the darkness, full of colors. We forget that the night is full of life. Nocturnal animals are more present and closer than we think. We only have to ask ourselves about them. There is no reason to fear them; in reality they are not the threat our imagination makes us think. They are part of our lives. Even in the city we're connected with the whole nocturnal world that we barely know. When we explore it, we open up a path to new questions, new paradigms, and we realize the mistakes we make because we're unfamiliar with our dark side. We fear the darkness instead of aspiring to know it.

> When the Sun sets and the stars come out, the landscape changes and fills with new colors and sounds. Hunters and prey exploit the advantages and opportunities that the cover of darkness offers; they exploit their senses to navigate in different ways. With bigger eyes, animals like the tarsius take advantage of the scant amount of light and can climb and hunt with agility. Sounds let predators like the owl find their prey, despite the fact that their night vision is similar to ours. Frogs and toads communicate through their song. Some animals, like insects, crustaceans, and arachnids, are capable of seeing the universe in ultraviolet light. Others, like serpents, see it in infrared. Humans only know these spectrums of light through specialized technology. The sense of smell allows several kinds of beings to discover their surroundings through aromas. The moon lights up open spaces and the stars are their GPS. Suddenly, the night doesn't seem as dark or as silent. It's an explosion of life, sounds, colors, sensations, and contrasts.[1]

The night in the city is greyer because of our artificially lit streets and without starlight. It's difficult to find the details; they're lost in the sound and in the lights. So, we've come to assume that the night is empty. We're wrong. While we sleep, outside our walls a whole other side of the city awakes. Creatures roam our streets that during the day hide in parks, gardens, and gullies. They don't cross our paths, so we're indifferent to their existence. However, they determine to a great extent the environmental balance that our lives depend on. The land where we live used to be invaded by species before we paved it over to create one of the world's largest, most highly populated cities. Each one of them plays a unique role in the ecosystem.

Many of these species were displaced. Now, you find them only in forests and protected national parks, and generally in small numbers. Nevertheless, some remained. They found a way to adapt to the new reality and to re-

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main unnoticed among us. This is the case of some small and medium-sized mammals like the opossum, the shrew, the grey fox, and the cacomistle or ringtail. The latter, particularly, lives in more and more corners of the city. With the flight of the large predators, their numbers have grown in the cities. This is a small, sweet mammal with a thin face and a ringed tail that used to live among our pre-Hispanic ancestors. Today, it lives among cats, flees from dogs, and eats out of garbage cans. It doesn't have such a bad life in the city, and today, it is a full-fledged urban animal. Its diet is flexible, making it easy to find food among what humans leave behind. Its small size allows it to easily take refuge in parks and reserves in the city. People very often like how it looks. Denizens of the capital welcome their sightings, describing them as looking like a cat, but with the tail of a racoon. In any case, they know how to hide and disappear from our view right away. Their only battle lost is the one against plastic, which causes their death due to intestinal blockage from ingesting it by accident, something that also happens to birds and mammals the world over.[2]

The ringtail owes much of its success in the city to its good relations with humans. It has a good reputation; it

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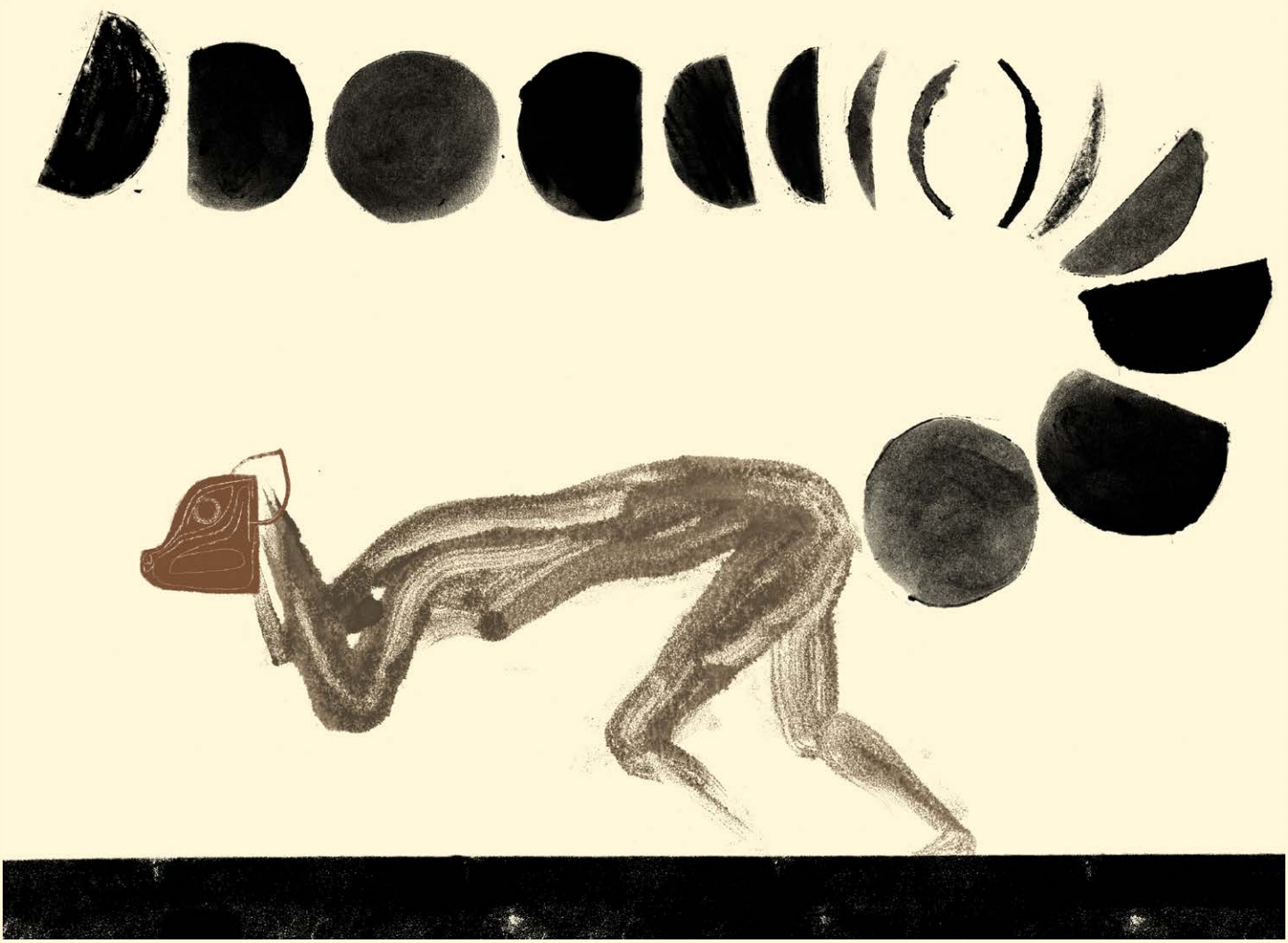

bothers no one; and it looks friendly. Another of its cohorts does not have the same luck, a smaller mammal but one burdened with a bad reputation. The city offers it many places to hide, like bridges, mines, and empty vaults. But here it faces the same problem that it does in the countryside and nationwide.[3] It is often judged and feared. On the news it is associated only with disease. Stories paint it as a being to be feared; it has been reduced to being a monster that sucks blood in the movies, and its presence is almost always associated with evil. In addition, its appearance is off-putting for many, who even describe it as a flying rat.

The reality is very far from all the myths. First of all, bats are not even rodents. They belong to the *Chiroptera* order, closer to humans than to rats. Only 3 out of the 1390 known species of bats feed on blood, and, of those three, only one hunts mammals. The diseases they have been associated with actually spread due to human activity, like the destruction of ecosystems and illegal trafficking in animals, which increases the contact between wild and domestic species, thus creating chains of contagion in which viruses and bacteria mutate and spread. The role

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of bats in this process is minimal, since they are only one link in these chains.[4]

If we disregard all that and allow ourselves to look a little deeper, we'll see that this is nothing compared to all the good bats do for our ecosystem and ourselves. They manage to prevent more diseases than they spread, since most of them (70 percent of their species) feed on insects like mosquitos, which are important vectors for diseases like dengue, zika, and chikungunya.[5] They also play an essential role in regenerating forests since they disperse the fruit seeds that they ingest and their excrement acts as a fertilizer. In addition, they pollinate several species of plants, many of which are important for human agriculture and animal husbandry. In fact, since we are on this topic, we owe them our thanks for every shot or drink of tequila, pulque, and mescal we have ever enjoyed: they're the ones who pollinate the agave plant![6]

With all of this knowledge, we can almost laugh at the fairytales and accept that our fear of these in many cases extraordinary beings is unnecessary. What is more, we can help share the truth and stop the killings that happen

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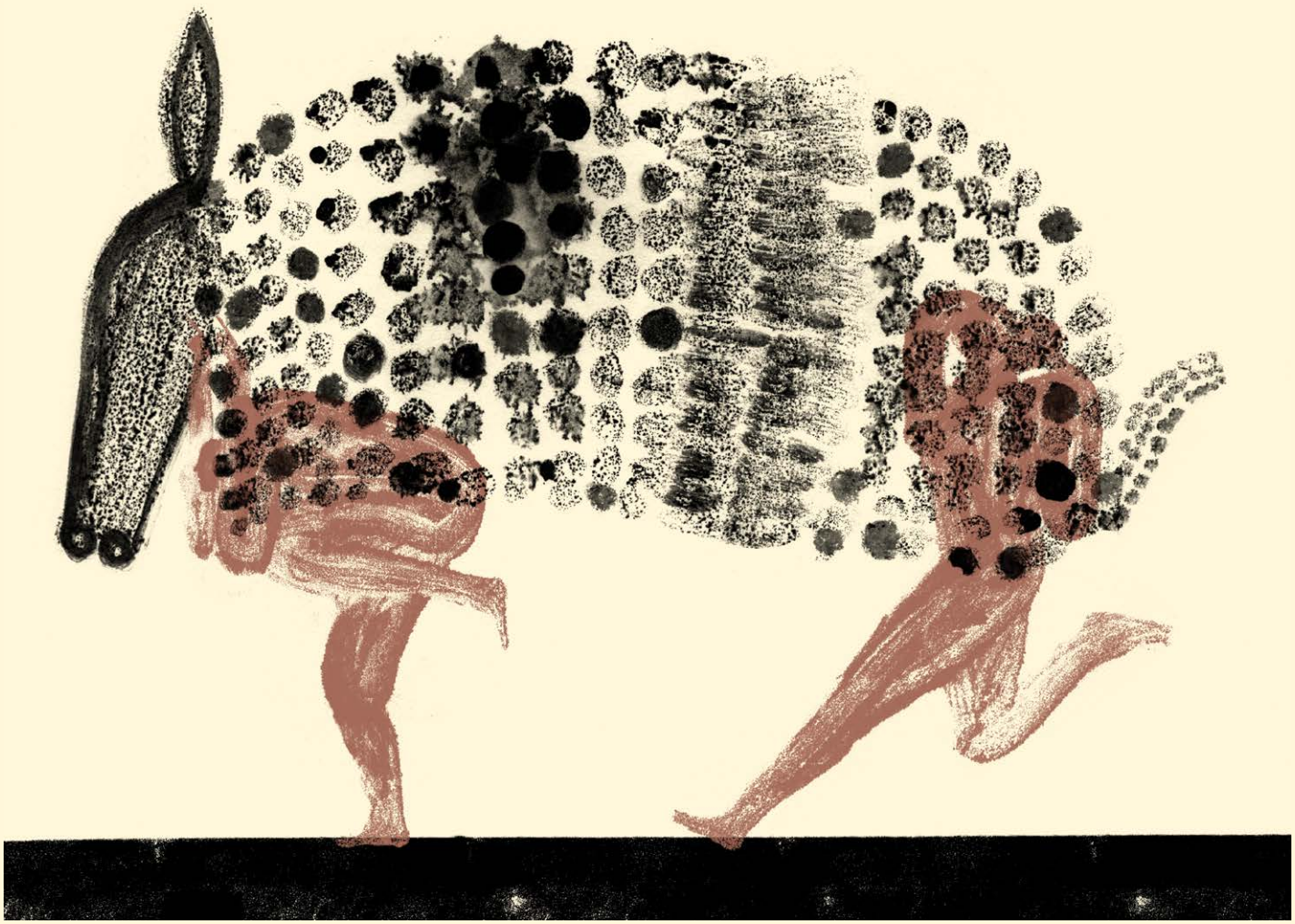

all over the country due to disinformation, which leads many people to believe that the solution is to eradicate them. People set up bright lamps in their nesting places to scare them away, poison them, and even burn them in their caves, pushing many species to the brink of extinction.[7]

Bats are the perfect example of how appearances are deceiving. We get stuck in our fear of an animal that actually is beneficial for us, and we make bad decisions. While turning our backs on them, we even protect another animal that really should concern us. This is one that is in the city because of our own activities. They have killed people who come across them by accident, and some just keep multiplying while we do nothing about them.

At first, they look like stray dogs on the street, but they're different. Behind that familiar appearance is a wolf, literally. Feral dogs are dogs that have returned to their wolf instincts. Let's go a little slower, here. Feral dogs are domesticated dogs that were abandoned and then join together in packs, where new generations are born in isolation. Their distance from humans have made them return to their primitive state little by little and become a new species: a city dog that behaves like a wolf. In the daytime they behave one way and, at night, another. In the daytime, they move in pairs; they're quiet and evasive, and don't go near anyone. At night, they become aggressive; they organize in packs and take up community hunting again in which they surround their prey and attack as a group. They don't go near humans except to defend their territories. In Chapultepec Forest, frequent cases have been reported of severe attacks on joggers. In one case in the Iztapalapa Municipality, a pack killed five people in a single attack. Stories like these are not uncommon in Mexico City, and the more you look into them, the more cases you find. As if that weren't enough, these animals, like other feral fauna, are important vectors for diseases and parasites that put both the population and the biodiversity of wildlife, animals that have lived here for a very long time, at risk. The generation of feral fauna is a problem the world over, and its growth is owed to human beings' worst practices: wars, over-population, and globalization. Besides dogs, these kinds of fauna include cats, rats, cockroaches, mosquitos, and many more species. They are here because of our mistakes and negligence.[8]

Among those who recognize the problem, many bravely try to eradicate them by catching, sterilizing or putting them down for everyone's good. However, their efforts fall short and they're attacked by self-appointed defenders of animal rights. In many cases, people even leave food out for these dogs that irresponsible owners have abandoned. This is once again a paradoxical truth, where we feed the problems that we ourselves have created. The solution to all of this lies in education and dissemination of information.

We have the power to change all this and better determine our way forward. The future of the biodiversity of wildlife and the balance of our ecosystems is in our hands, whether we want to recognize it or not. What happens at night is not alien to us; we're part of that reality. When we refuse to recognize that, even without realizing it, we push the scales against ourselves. The night and darkness are not frightful, but ignorance and disinformation are. We have sufficient senses and tools to take advantage of and explore the nocturnal world that surrounds us. It's anything but empty. We have to look beyond appearances and explore the unknown to find the truth and define our future. Let us explore the night. It may take a moment for our eyes to adjust, but then we'll be able to see a landscape rich in sensations and a sky full of stars appear before our eyes. VM

Notes

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7 Yolanda Hortelano-Moncada and Fernando A. Cervantes, op. cit.
8 Kaitlyn M. Gaynor, Cheryl E. Hojnowski, Neil H. Carter, and Justin S. Brashares, op. cit.