

The Resilient Cat:
The Leopard
By Peter Hudson

CONTENTS

EDITOR'S DEN

Welcome to PT Aware
By Raghul Patteri

04

FOUNDERS' NOTE

By Hermis Haridas &
Nisha Purushothaman

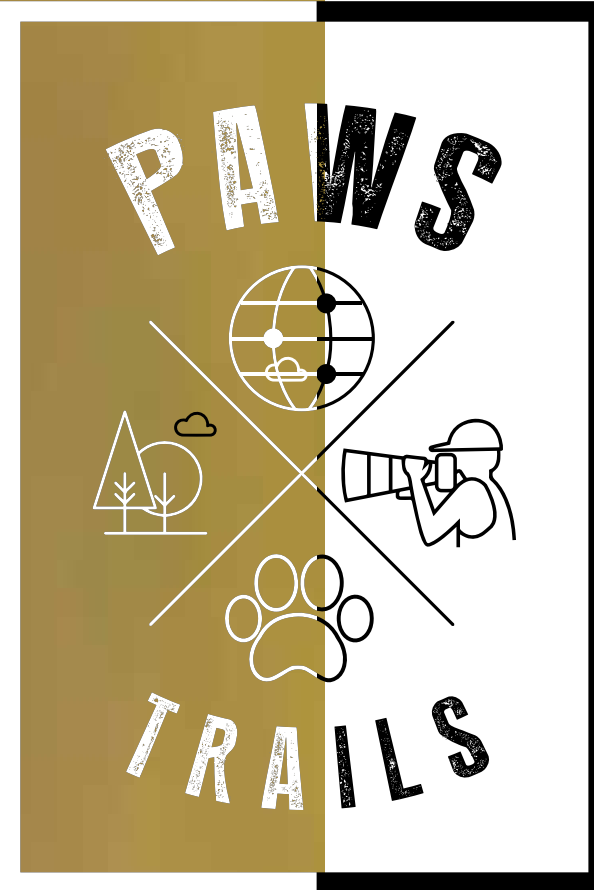
07

THE STORY

The Resilient Cat: The
Leopard
By Peter Hudson

08

Photo By:
© Kiran Krishnan



Publisher: Paws Trails Explorers **Editor:** Raghul Patteri **Conservation Director:** Peter Hudson
Content Director: Nisha Purushothaman, **Director Photography:** Hermis Haridas, **Design desk :** Nithya Purushothaman
Copyright © Paws Trails Aware



Raghu Patteri
Editor

There is something uniquely captivating about the leopard. Unlike lions that dominate the savannah or elephants that command attention through sheer presence, the leopard survives through patience, adaptability, and remarkable resilience.

In this edition of PT Aware, Dr. Peter Hudson explores not only the biology of the leopard but also the deeper understanding required to photograph and tell meaningful conservation stories about one of the world's most adaptable predators.

The leopard's story is especially relevant today. While many large carnivores continue to lose habitat, leopards have shown an extraordinary ability to adapt, surviving in forests, deserts, farmland, and even on the edges of cities. Yet resilience should never be mistaken for security. Their future still depends on protecting habitats, maintaining healthy prey populations, and promoting coexistence between people and wildlife.

As photographers, we have an opportunity and a responsibility to look beyond creating beautiful images and instead tell stories that inspire understanding and conservation.

A heartfelt thank you to everyone who contributed photographs to this article. As always, your images are an essential part of the stories we share with our readers in every edition.

Our next edition will feature the Shallows Turaco, please keep your images ready.

EDITOR'S DEN



Photo by: © Muhammed Jenos

FOUNDERS' NOTE

Every photograph has the power to do more than capture a moment—it can tell a story, inspire curiosity, and encourage people to care about the natural world.

This edition reminds us that conservation begins with understanding. Whether it is learning how a leopard uses the landscape to survive, appreciating the remarkable adaptability of wildlife, or recognizing the delicate balance between people and nature, knowledge allows us to see beyond the surface.

One of the most inspiring conservation stories of our time is not always about bringing species back from the brink. Sometimes, it is about learning to live alongside them. Across many parts of the world, communities, researchers, photographers, and conservationists are finding new ways to coexist with wildlife, proving that sharing landscapes is not only possible but essential for the future of biodiversity.

As photographers and nature enthusiasts, we have a unique responsibility. Every image we create has the potential to educate, inspire, and foster respect for the wild. Let us continue to tell stories that celebrate not only the beauty of nature but also its resilience.

Together, through awareness, compassion, and responsible action, we can ensure that future generations inherit a world where wildlife continues to thrive.

Explore more editions at www.pawstrailsmagazine.com

Sincerely,

**Hermis Haridas &
Nisha Purushothaman**

Founders - Paws Trails





Canon
IMAGING PARTNER

Peter Hudson is a scientist, photographer, and conservationist. He undertook his first scientific expedition to Africa at the age of 21 and has been a regular visitor ever since. Passionate about nature, he manages his own 36-hectare nature reserve in Pennsylvania which is home to bears, bobcats, and other animals. In his professional career, Peter is the Willaman Professor of Biology at Penn State University where he is an ecologist who studies a wide number of wildlife issues, mostly associated with infectious disease. For more than a decade he has been studying how bat biology has changed and why viruses are now being passed from bats to humans and causing problems such as the Covid pandemic. He has been studying a wide array of natural systems including the wolves and ecology of Yellowstone, tortoises in the Mojave Desert, and bighorn sheep in Idaho.

Peter is the Conservation Director at Paws Trails and uses his skills as a scientist and educator to increase awareness about conservation issues. He is also heavily involved with the Random Good Foundation that undertakes storytelling for social change.

THE STORY

The Resilient Cat: The Leopard

By Peter Hudson
(Conservation Director, Paws Trails)

Images by: Peter Hudson, Amith Krish,
Deepa Girish, Angela Ratnam, Anand Kumar,
James Varghese, Hermis Haridas, Muhammed
Jenos, Kiran Krishnan, and
Nisha Purushothaman



How an understanding of leopard biology can transform the way you photograph and tell stories about the world's most adaptable big cat

Within ten kilometers of Cairo, not in a zoo nor in a reserve, but in the fractured scrubland at the city's edge lives a leopard (*Panthera pardus*) that hunts dogs and raids goat pens and yet, there are no images of her. This contrasts with the black leopard of Lakipia that now fills our Instagram feeds daily. Without question the various species of leopards are the ghosts of the big cats, they can just fade into the background and live without trace, living alongside humans with no one aware of their close neighbor. This plasticity in their behaviour is the secret of their success and why some of the other leopard species like snow leopards are now bouncing back.

Consider two aspects of leopards that seem contradictory. Firstly, leopards are solitary, secretive, and largely nocturnal. A single adult male may patrol a home range of several hundred square kilometers, marking it with scratch posts and urine, but rarely letting himself be seen. Radio-collar studies of leopards in the Kruger National Park have found males will move 20 kilometers in a single night, slipping through gaps in vegetation that seem impossibly narrow for an animal weighing 70 kilograms. Everything about the leopard's body plan, the flattened skull, the long flexible spine, the rosette patterning that breaks up its outline in dappled light are all adaptations to this ghostly mode of life.



Photo by: © Angela Ratnam

Secondly, leopards are the most widely distributed wild felid on Earth. They occupy more countries and a broader range of habitats than any other large cat and range from the cedar forests of the Atlas Mountains to the mangroves of the Sundarbans, from the snowfields of the Russian Far East to the livestock kraals of Namibia's farmlands. While lions have lost 94% of their historical range and tigers hang on in scattered fragments, leopards persist across sub-Saharan Africa, the Middle East, Central Asia, and South and Southeast Asia. The same adaptations that make them invisible, makes them successful.

These two facts define not only the photographic challenge but also the photographic opportunity.

Reading & Predicting Leopard Movement

I have very fond memories of being with Todd Gustaffson in Ndutu when we spotted a leopard in a tree and he predicted where the leopard would descend and pass, so he positioned the vehicle at a distance to give it space and so we could catch a shot as she descended the tree and ran towards us. Todd's insights were spot on, and we caught some nice images. This was the classic leopard encounter, a leopard draped across a horizontal branch, waiting and watching for food yet remaining invisible from the ground. This encounter taught me that photographers must seek to understand animals so we can

predict and this is particularly important with leopards.

Leopards are ambush predators, and their behaviour is governed by cover and concealment. Unlike lions, which are social and coordinate hunts in open habitat, leopards rely on getting within two to three meters of their prey before striking. This means they are intimately tied to structures such as rocky outcrops, riverine thickets, the canopy of a mature acacia. If you learn to read the landscape the way a leopard reads it, you begin to understand not just where to find them, but where they will prowl. Once, I was watching my favorite leopard in the Masai mara, Luluka, and I was with John who said – she will use the cover but must appear about a kilometer down the river, to which he placed the vehicle below the ground level and had her trot out at eye level – superb experience.

Positioning matters more than equipment. As leopards are low to the ground or in mid-canopy, the most powerful images are made from the same height as the animal. This means getting your vehicle as close to ground level as possible or waiting for the leopard to descend from a tree before attempting any serious shooting. Images taken from above, looking down onto the animal, flatten its three-dimensionality and diminish its presence. Eye-level or below-eye-level contact transforms the viewer's relationship to the subject.

Dawn and dusk are not merely better

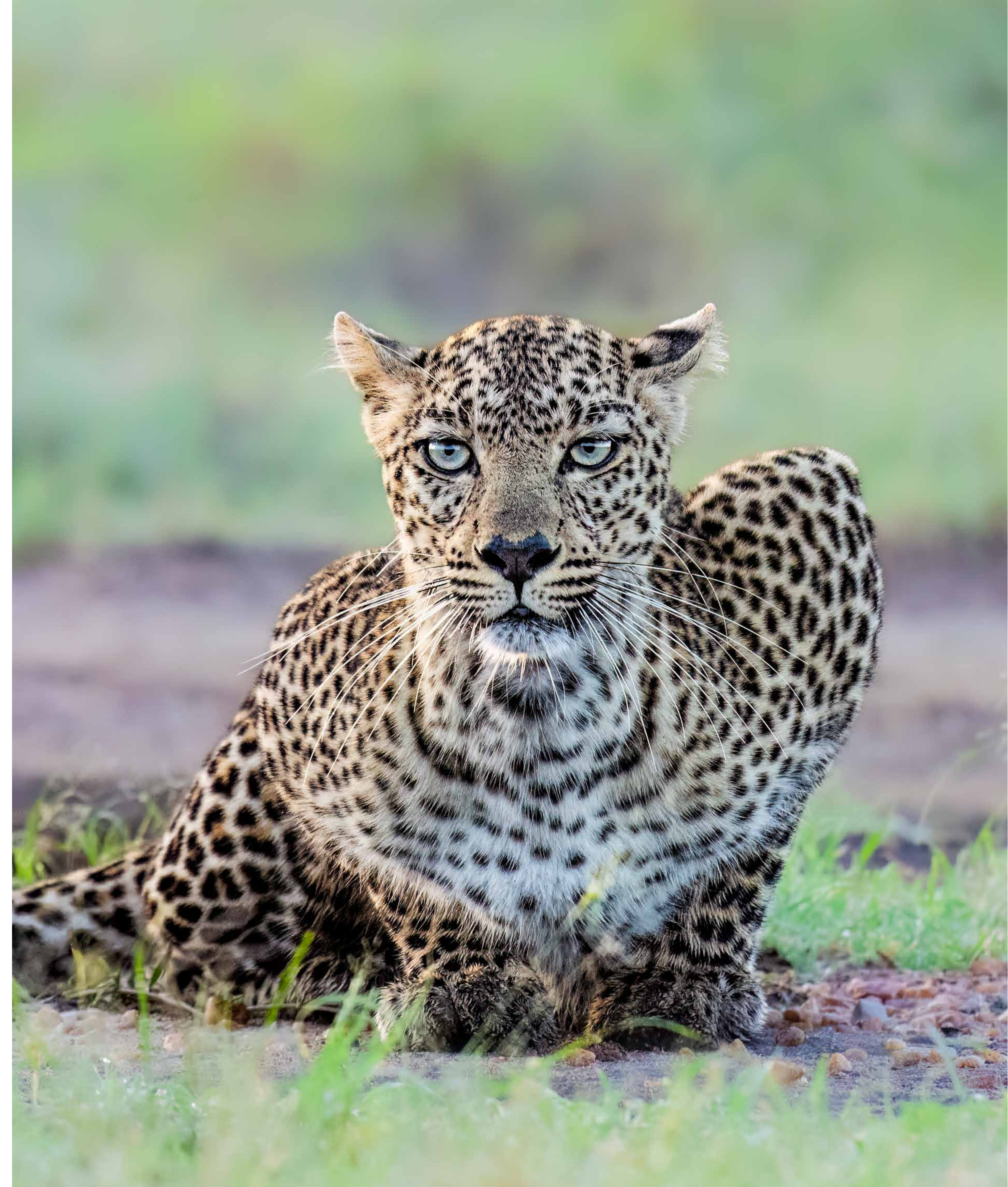


Photo by: © Hermis Haridas



Photo by: © James Varghese

light for photographers, they are also when leopards are active. The foveal cells in a leopard's retina permit vision in light conditions roughly seven times dimmer than human limits, and the tapetum lucidum, the reflective layer behind the retina that produces eyeshine, amplifies available light further. A leopard doing nothing at noon is a leopard resting between hunting bouts. A leopard moving through golden-hour light is engaged with its world, and that engagement produces images that carry narrative weight: an animal in motion, ears forward, body low, attention fixed on something you cannot yet see.

The Photography

Patience is primary, leopards do not perform on schedule. The photographers who return with remarkable images are those who find a productive area, a kopje with scratch marks, a river crossing with pugmarks, a fig tree with a cached impala and work it across multiple days, if not seasons. This is exactly what John was doing.

The stunning rosette patterning on the coat of a leopard, evolved for concealment but creates a technical challenge in bright, contrasty light. Shoot in raw and expose for the eyes, not the coat. The eyes are the narrative anchor of any felid portrait since they carry intention, emotion and wisdom. A sharp eye floating above a slightly underexposed coat will always outperform a perfectly

metered coat surrounding a blown-out or soft eye.

The most compelling leopard stories are not portraits but those that expose interactions with prey, mates and babies. There are sequences: the slow and long stalk, the freeze, the explosive rush, the carry of a kill up a vertical trunk, sharing with the offspring and the hyaenas attempting to grab and steal the carcass. Anticipating all of this requires an understanding of the biology and reading the animal's body language. A tail that begins to flick slowly and rhythmically signals elevated attention. Ears rotating independently suggest the leopard is triangulating sound. A lowering of the hindquarters, weight shifting to the rear legs, is the final compression before a charge. These are the frames that photographers remember.

Living in the Cracks

Leopards' extraordinary flexibility is not merely ecological, it is also behavioral, dietary, and physiological. They will take prey ranging from dung beetles to young giraffe. They can survive in landscapes that receive fewer than 50 millimeters of rainfall per year. They can meet their entire water requirement from prey. This metabolic and dietary breadth is why they persist in agricultural landscapes from which lions and cheetahs were eradicated from generations ago.

India's Sanjay Gandhi National Park, a forest fragment surrounded by Mumbai has a resident leopard population of approximately 47 individuals that live alongside seven million people and are sustained largely by feeding on feral dogs and livestock. Attacks on humans do occur, but the fundamental reality is one of coexistence; animals and people sharing space that neither party fully controls. In the Laikipia Plateau of Kenya, livestock herders have documented leopards returning to the same territories for decades despite chronic conflict. The cats have learned to avoid human activity at predictable times while continuing to use the same drainage lines and rocky ridges.

This adaptability is intriguing and the conservation story that photographers are positioned to tell. The leopard does not need pristine wilderness but fragments of cover, a prey base, and a degree of tolerance from the humans it lives alongside. The images that advance leopard conservation and understanding are not always the transcendent wildlife portraits, the bread and butter of the photographer but should embrace the scratch marks on a fence post at the edge of a coffee plantation, the pugmark in soft mud beside a village well, the blurred image from a camera trap in what appears to be a completely unremarkable patch of bush. These images illustrate that leopards are ubiquitous, that the question is not how to bring them

back from the edge but how to stop pushing them off it.

Threats

Despite their resilience, leopards face mounting pressure. Habitat fragmentation disrupts the large home ranges males require for breeding access, producing isolated subpopulations that cannot exchange genes. Prey depletion, through bushmeat hunting and competition from domestic livestock force leopards into contact with humans. The skin trade, though significantly reduced since being listed in CITES in 1975, continues in parts of South and Southeast Asia. Some subspecies, including the Amur leopard of the Russian Far East, have been reduced to fewer than a hundred individuals.

The broader pattern, however, is one of surprising persistence against the odds and that, too, is a story. The leopard has seen the lion retreat, the tiger fragment, the cheetah specialised itself into a corner. It has done none of these things. It has stayed - adapted and flexible. For the photographer, this is not merely a subject. It is an argument: that the wild world, given the slightest margin, will find a way to remain. The cat that lives near Cairo would agree, if it ever consented to be seen.



Photo by: © Amith Krish









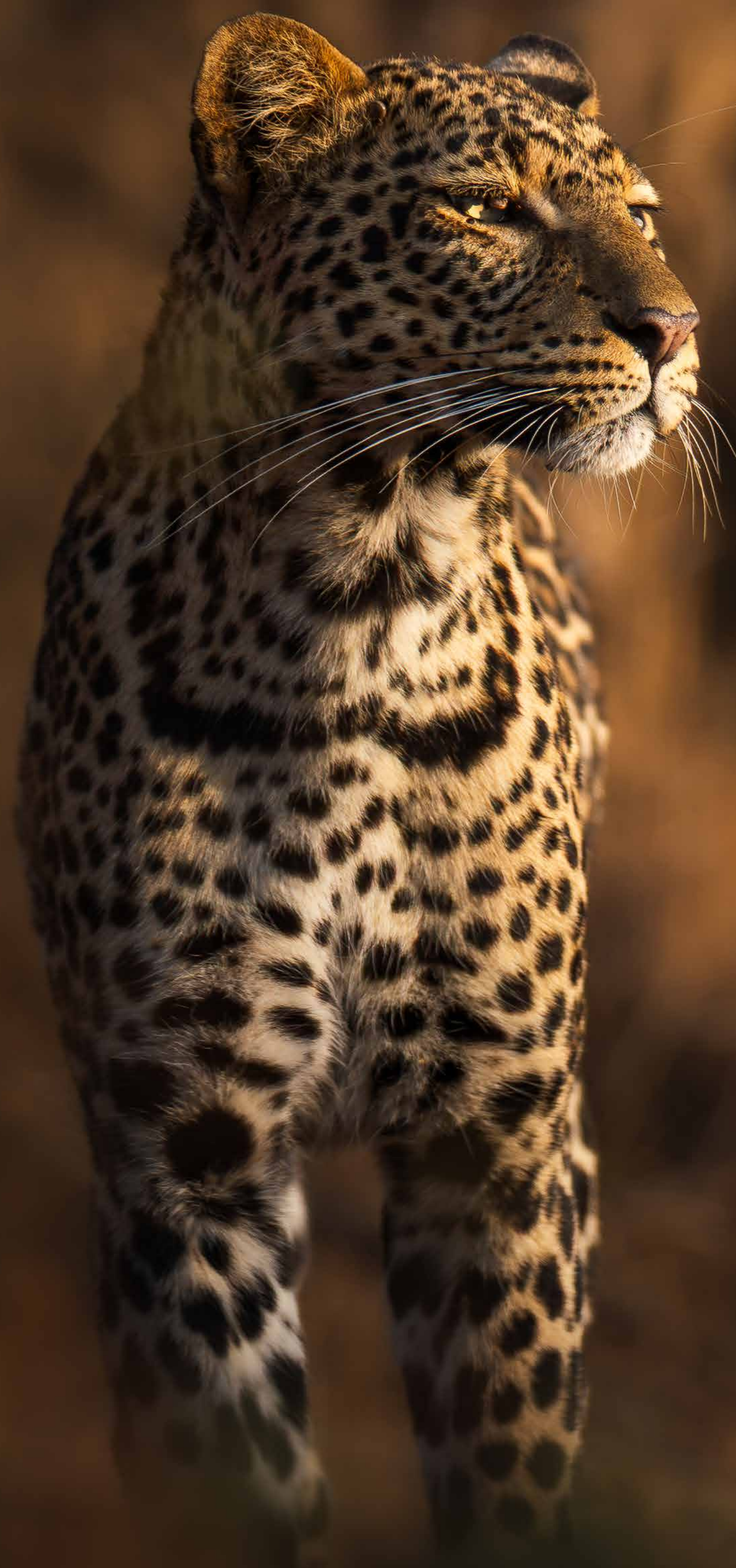


Photo by: © Angela Ratnam

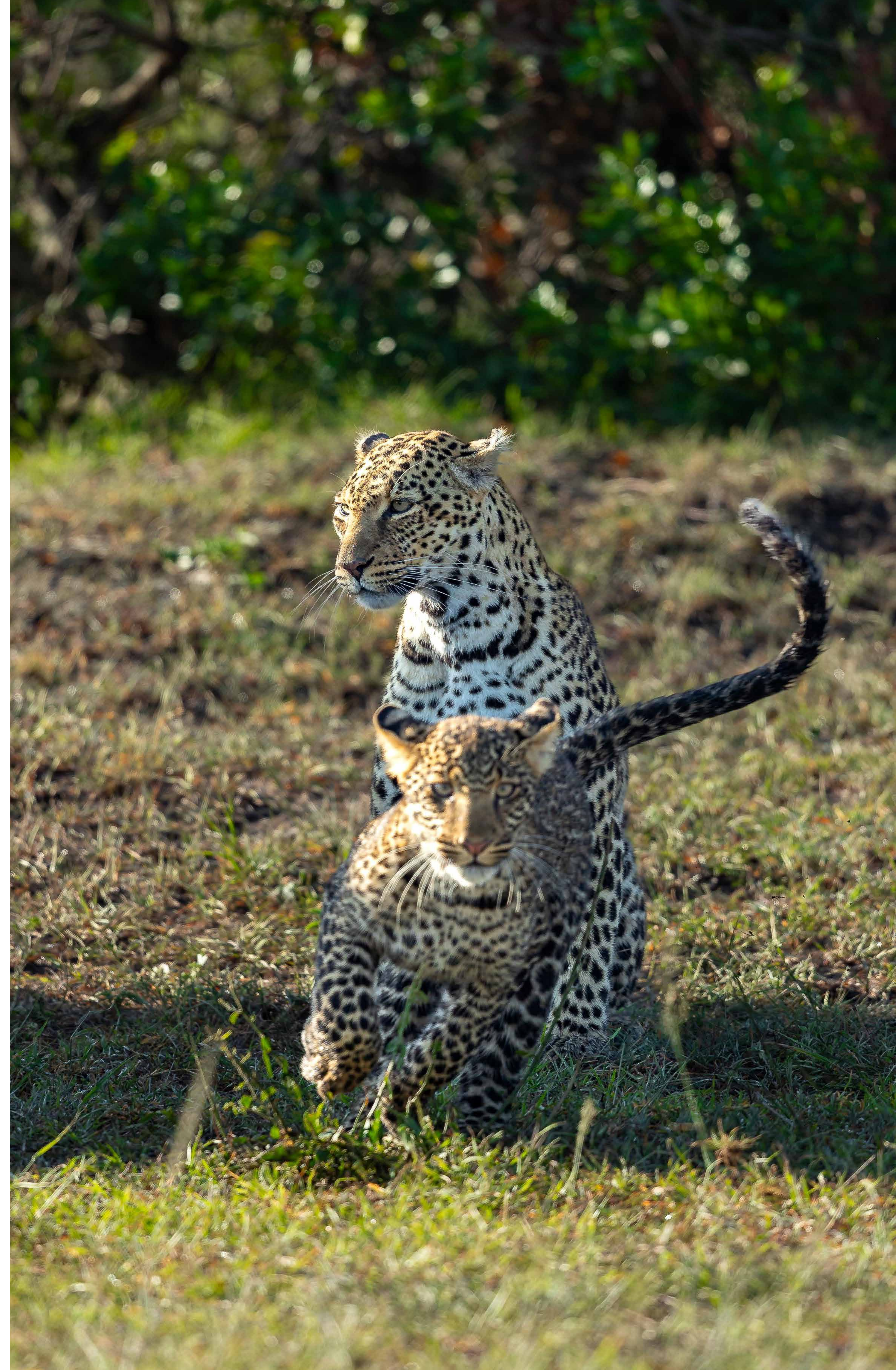


Photo by: © Amith Krish











Photo by: © Peter Hudson



Photo by: © Angela Ratnam















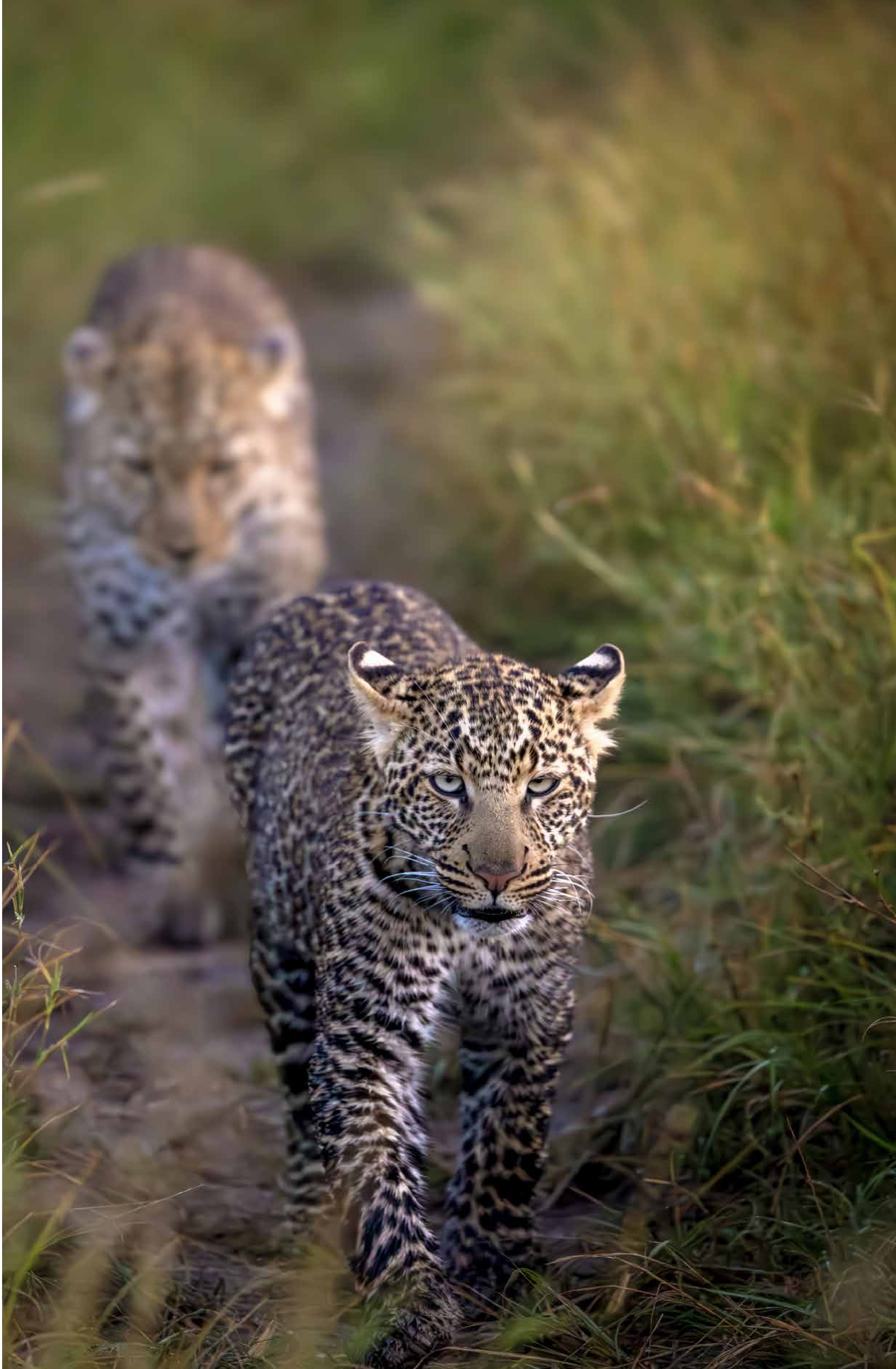


Photo by: © Kiran Krishnan



Photo by: © Nisha Purushothaman







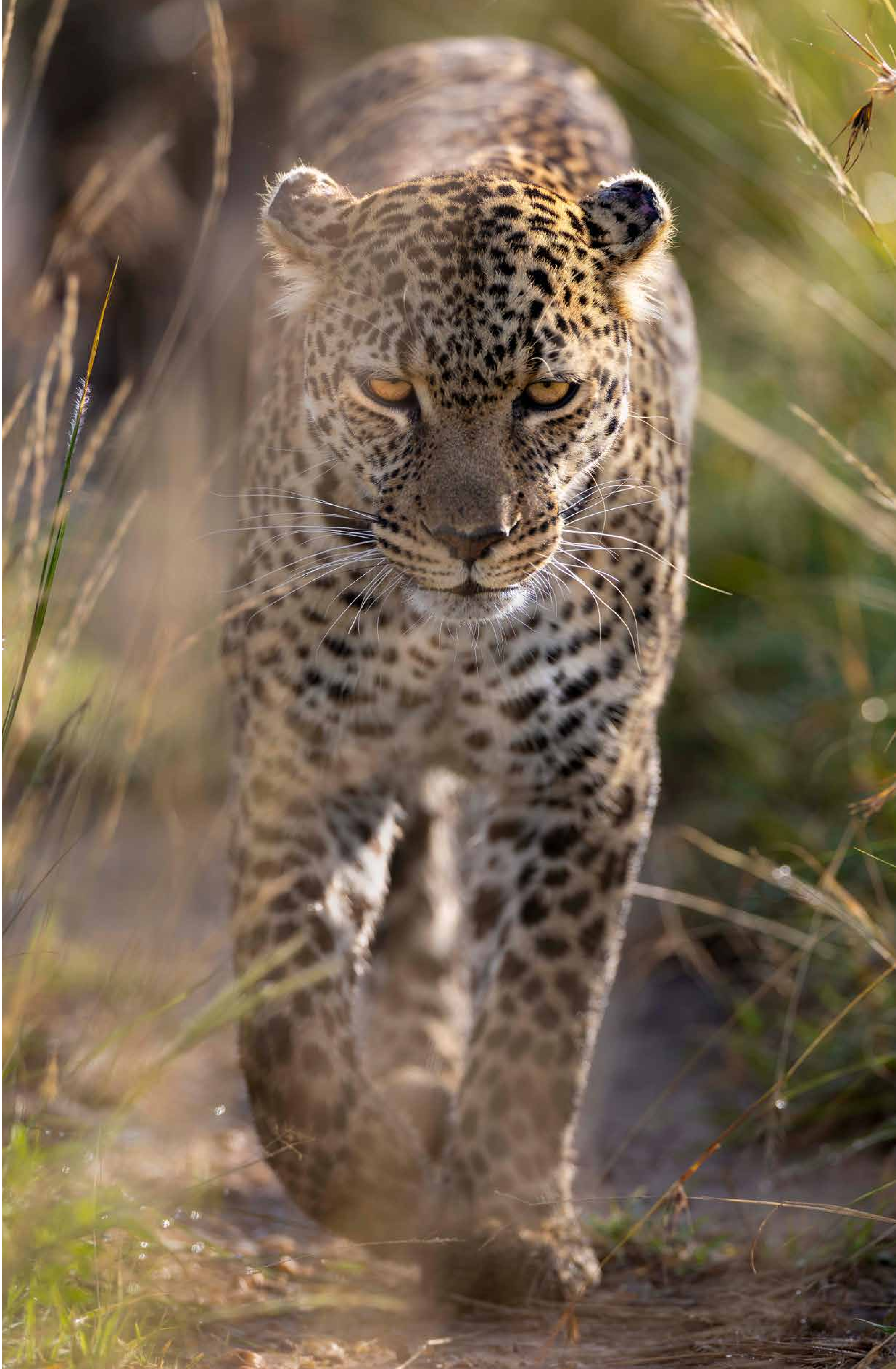


Photo by: © Kiran Krishnan

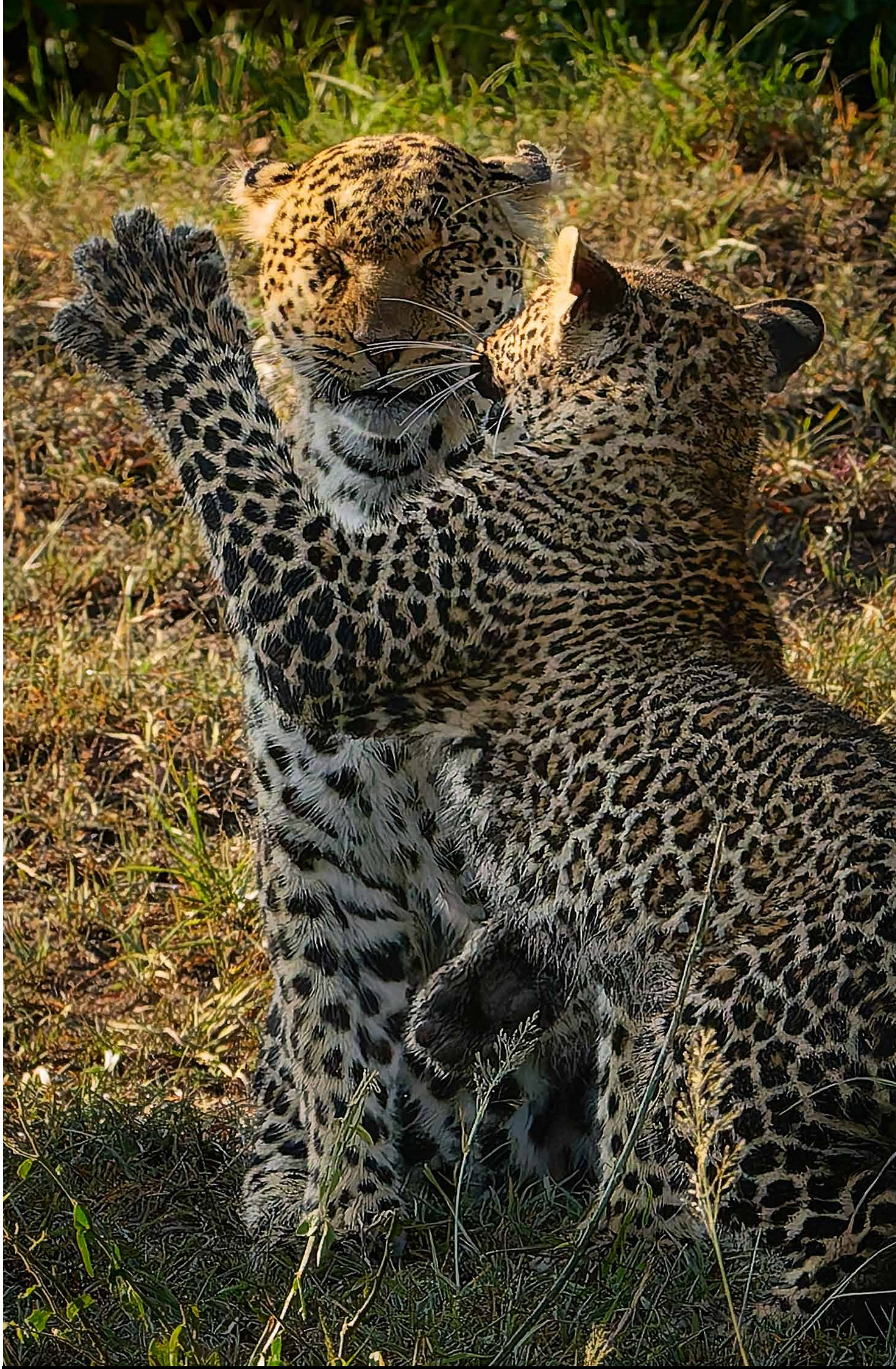


Photo by: © Peter Hudson









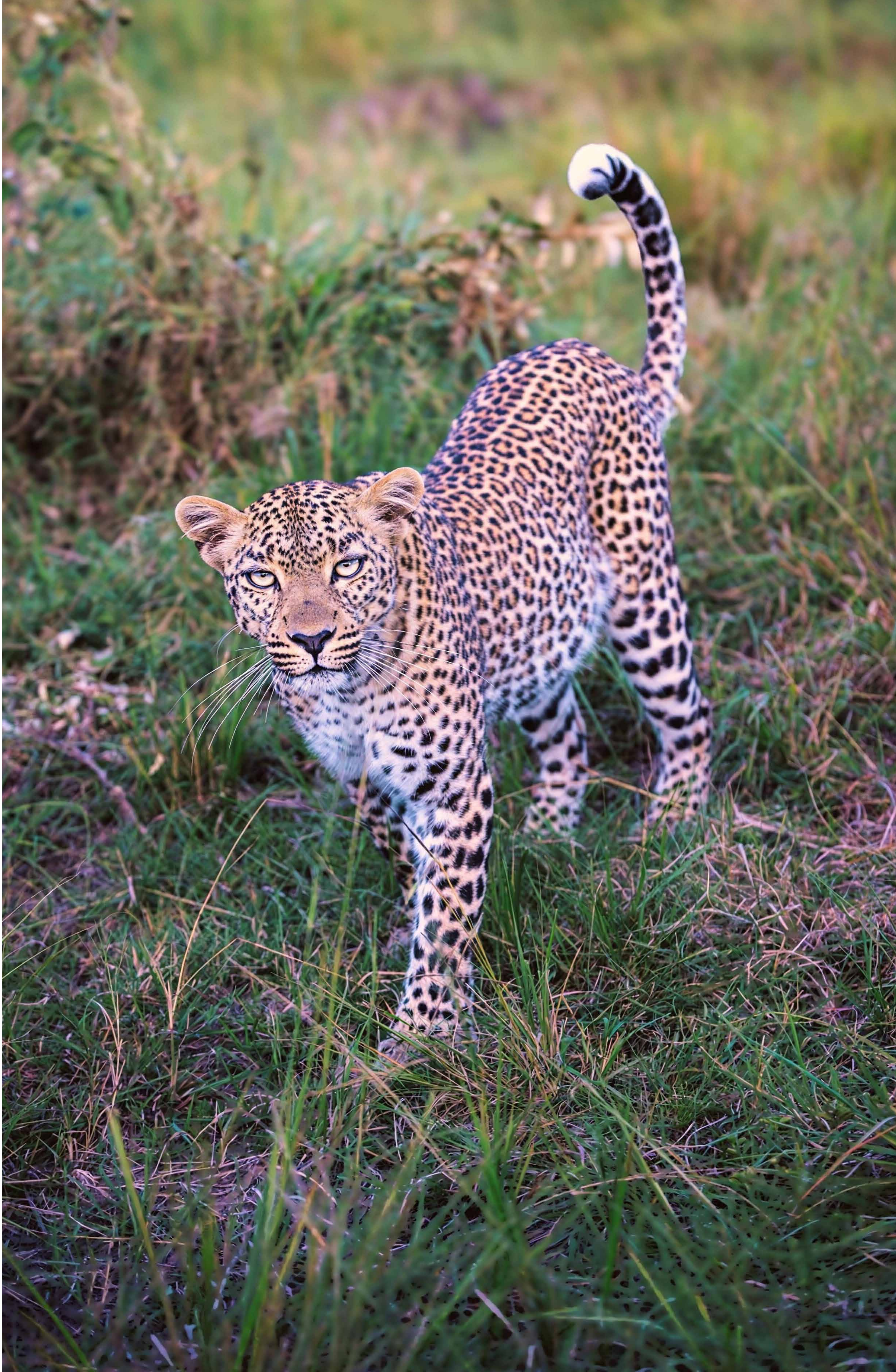


Photo by: © Kiran Krishnan



Photo by: © Nisha Purushothaman



Photo by: © Muhammed Jenos







Photo by: © Peter Hudson

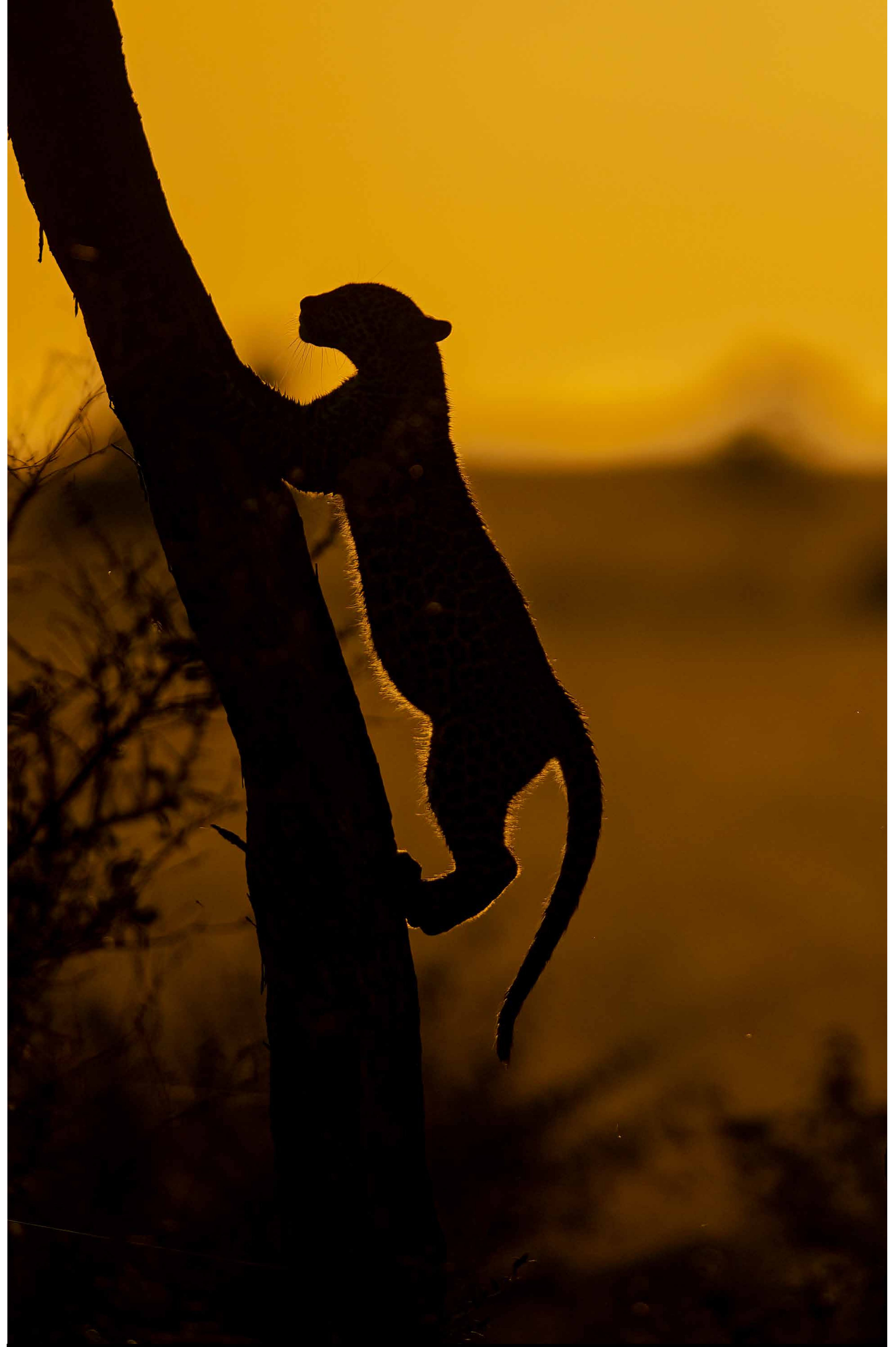


Photo by: © Nisha Purushothaman

































SHALLOWS TURACO

