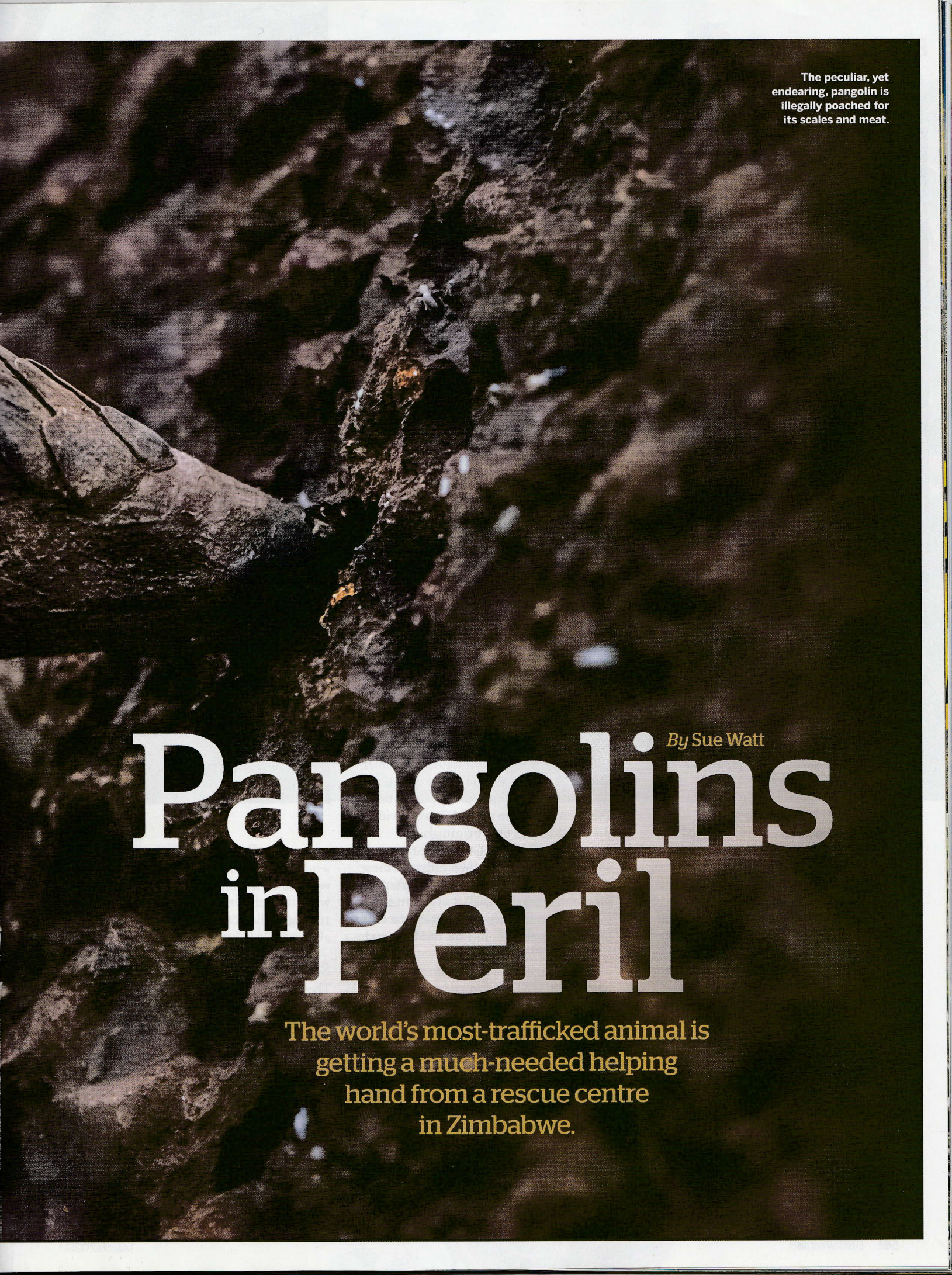






The peculiar, yet
endearing, pangolin is
illegally poached for
its scales and meat.

By Sue Watt

Pangolins in Peril

The world's most-trafficked animal is
getting a much-needed helping
hand from a rescue centre
in Zimbabwe.



On the back seat of our Land Cruiser, it feels utterly surreal. Champ and Mhepo are lying contentedly on the laps of two minders, being held as you might hold a giant baby, while they are driven to a secret location for their breakfast. Champ turns shyly in my direction, then closes his eyes; Mhepo is wide awake and restless.

"These two pangolins have walked very interesting paths, but they've survived," Lisa Hywood says of her scaly passengers, which look like toy dinosaurs. Champ had been blinded in both eyes by a spitting cobra. Mhepo had been rescued from the illegal wildlife trade, her hands and claws badly damaged as if they'd been slammed in a door several times.

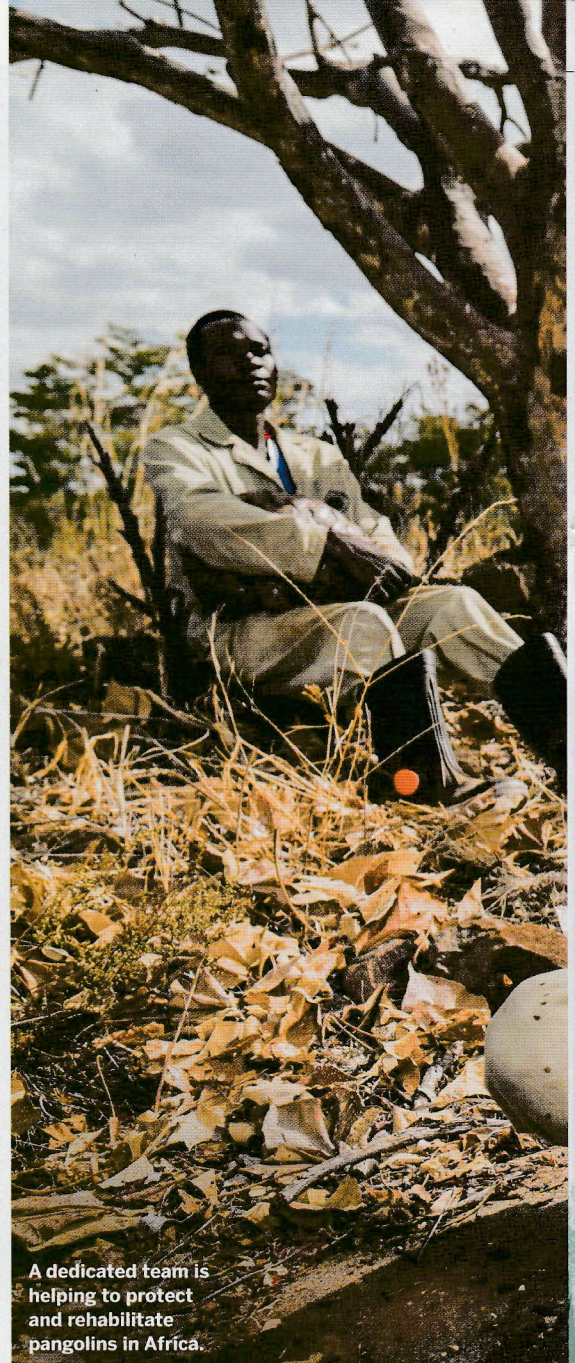
If anyone could help them recover, it would be Lisa. A world authority on pangolins, she's the founder of the Tikki Hywood Foundation (THF), a conservation

charity based in Zimbabwe that works to protect lesser-known endangered species and return rescued animals to the wild. In recent years, much of her work has focused on pangolins, with about 50–60 rescued annually.

Pangolins have the unenviable reputation of being the world's most trafficked animal, hence the secrecy around where we are. This rescue centre isn't open to the public, but I've been allowed to see THF's work with these mysterious little mammals.

In 16 years of travelling to Africa, I've never spotted a pangolin, so when I first see these two in their large wooden crate (a substitute for their dens in the wild), I'm mesmerised by their extraordinary scaly bodies (the size of a spaniel), their funnel-shaped faces and sleepy little eyes.

Champ breaks the spell by weeing in his crate, rolling in his urine and rubbing it around his body as if it were shower gel. In a way it is – pangolins can't clean themselves easily because of their scales, and the



A dedicated team is helping to protect and rehabilitate pangolins in Africa.

ammonia in their urine kills the bugs. Then a minder puts him on the scales: they're weighed on waking up, and before and after walks. Champ weighs in at an impressive 11.45kg, while Mhepo, being female, is almost a kilo lighter.

Sensitive souls

These are ground pangolins, *Smutsia temminckii*, the only species that roams Zimbabwe's wild places. Found throughout southern and eastern Africa, their habitats consist of savannah woodland, scrub and sandy floodplains.

Mostly nocturnal and solitary characters, pangolins are an enigma: no one knows how many there are or how long they live. "There's so much we don't know about them. They're very clever, though," Lisa tells me. "People severely underestimate their intelligence just because they're funny-looking creatures."

"People underestimate their intelligence just because they're funny-looking creatures."

Above: pangolins are born with soft scales that quickly start to harden. Right: poachers capture and kill the species for its scales.



The Tikki Hywood Foundation

Established over 25 years ago, in memory of her late father, Tikki Hywood, Lisa's aim with the foundation is to protect lesser-known endangered species.

Wild cats, hedgehogs and cheetah, among others, have since passed through its doors. Its work goes beyond the rescue, rehabilitation and release of wild animals, however – encompassing community outreach and education, international advocacy on

CITES and IUCN issues, awareness-raising, working with legislators and the judiciary, and research.

The foundation also works closely with organisations in other countries, including Uganda, Liberia, South Africa and Cameroon, where it's opening the first rescue and rehabilitation centre in West Africa. tikkihywoodtrust.org

Lisa provides pangolins with expert care.

When we get out of the Land Cruiser, our two pangolins are put on the ground. Champ stays close to Lisa, but Mhepo is on a mission. Like a small tank, she's off – walking quickly, almost horizontally, on her back legs with her front paws raised near her chest, as if in prayer, and her tail raised off the ground to help her balance.

The pangolin's most distinctive feature is its armour – those sharp, brown scales, which look like flat scallop shells, overlap across its body and make its tail immensely strong. Scales are absent only on its stomach, face and inside legs, which are covered with fine hair. As we walk, Champ tries to get closer to me and, for a moment, I'm thrilled. "Be careful," Lisa warns me. "He knows you're new. You could be a threat, so he might lash out with his tail and cut your leg."

Moving swiftly away, I notice the ridges across the length of Mhepo's scales. "They're a sign of trauma – that's when she was poached from her mother," Lisa explains. "Just like when we experience a trauma, we can see ridges in our nails as a stress effect, babies that come here are all like that. One was just two weeks old, pink and ice-cold. His scales were soft like fish. They're born with scales and they get harder each day."

It's hardly surprising that pangolin scales react the same way to trauma as human nails: they're both made

of keratin. The protective armour helps shield them from threats: they simply curl up in a virtually impenetrable ball when they sense danger, though predators such as hyena and honey badgers can crack through.

Scale of the problem

The name 'pangolin' comes from a Malay word 'penggulung', meaning 'something that rolls up'. But rolling into a ball can't protect them from poachers, their most dangerous predator: it simply makes it easier for assailants to pick them up. Ironically, their scales are the prime reason pangolins are so valuable in the illegal wildlife trade.

The UN Environment Programme estimates that more than a million pangolins have been trafficked in the last decade. Incorrectly believed to cure a variety of ailments, from





Piles of pangolin scales seized by authorities highlight the illegal trade.

Scales: Alex Holford/EPA/Shutterstock; pangolins (x2): Neil Aldridge/naturepl.com

arthritis to male impotence, the scales are used in traditional medicine, particularly in China and Vietnam. Pangolin meat is also considered a delicacy in the Far East. Since the Asian pangolins have been poached to virtual extinction, illegal traders have turned to the African species – the number and size of seizures has risen dramatically over recent years. “We don’t know whether the scales they’re trading are fresh – that is, recently killed – or still from hunters’ old stockpiles,” explains Lisa.

Closer to home, the bushmeat trade within west and central Africa is adding to the pangolin’s woes, with bushmeat traders jumping on the bandwagon of Asian demand for scales.

“Before, they would cook the entire pangolin on the fire,” she continues. “Now they boil it to get the scales off then sell the scales and eat the meat. If scales look charred, they’re likely to be old.”

Despite limited resources, Zimbabwe is one of the most proactive countries in Africa when it comes to pangolin conservation and illegal wildlife trade prosecutions. In 2018, 114 suspects were arrested for illegal wildlife offences, resulting in 60 poachers being sentenced to a minimum nine years in jail

for their first offence, a sentencing policy that is a true deterrent to poaching.

Rescue and rehab

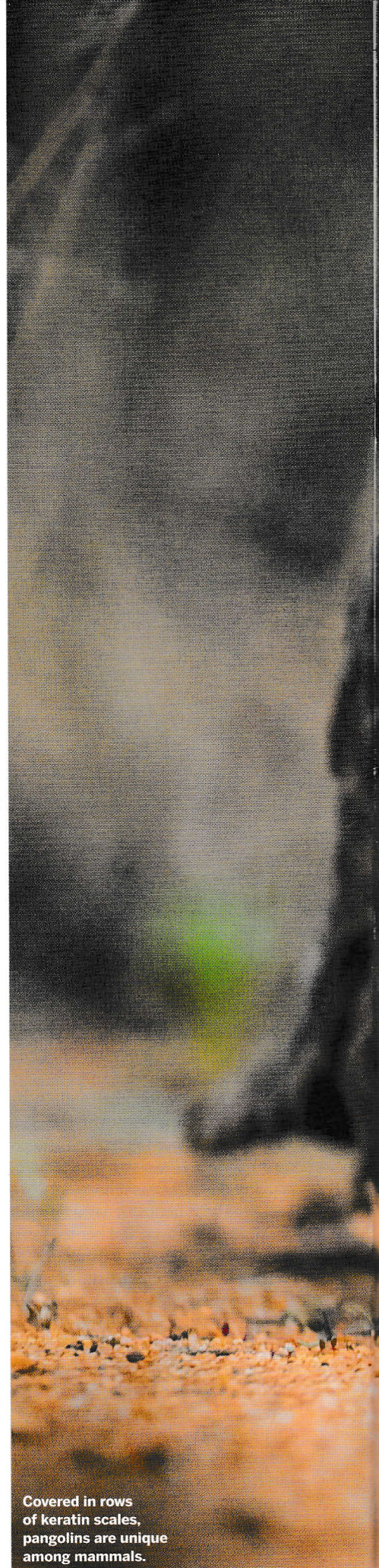
Watching Champ and Mhepo as they forage, it seems unconscionable that these harmless, charismatic creatures should be so persecuted. Champ is a feisty guy, rolling joyfully in fresh zebra dung and sniffing loudly around leaf litter, busily digging for ants. Mhepo is more precious, scraping half-heartedly because her claws are still not fully recovered. But they’re fussy eaters. Mhepo walks away from one teeming colony to terrorise a tastier but far smaller number of ants discovered after a minder turns over a rock: she laps them up with her sticky pink tongue, which looks like an elongated worm.

A keystone species, the pangolin helps maintain the natural balance in the landscape by keeping ant and termite populations in check. They’re perfectly designed for catching their prey. Their strong claws rip into nests and termite mounds. Their tongues, which are as long as their torso and fixed from their pelvis, stretch easily into the depths of nests. They don’t have teeth – they use small stones in their stomachs to grind food, similar to a ▶

HOW TO SEE A GROUND PANGOLIN

- » There’s no guarantee of spotting the species, but given Zimbabwe’s commitment to pangolin protection, the country’s national parks, at least, offer hope of a sighting and certainly merit support.
- » Avoiding the rainy season, the best time to visit is between June and November.
- » Africa Conservation Travel (africaconservationtravel.com)

arranges trips across Zimbabwe, with a percentage of revenue being distributed to conservation and community-development organisations. Other tour operators offering trips to Zimbabwe include Expert Africa (expertafrica.com) and Yellow Zebra Safaris (yellowzebrasafaris.com), both of which also contribute to charities working in the areas they travel to.



Covered in rows of keratin scales, pangolins are unique among mammals.



Champ is a feisty guy, rolling joyfully in zebra dung and sniffing loudly around leaf litter.

AT A GLANCE

GROUND PANGOLIN

Smutsia temminckii



Of the four species of pangolin found in Africa, the ground (or Temminck's) is the most widespread.

LENGTH Up to 1.2m.

WEIGHT Between 7–12kg. The largest on record weighed in at 19kg.

DIET This armour-plated mammal is also known as a scaly anteater due to its diet, which consists of mainly ants but also termites.

LIFE-CYCLE A single offspring is born after a gestation period of 105–140 days and will remain with the mother for three to six months. Individuals are estimated to have a lifespan of 20 years or more.

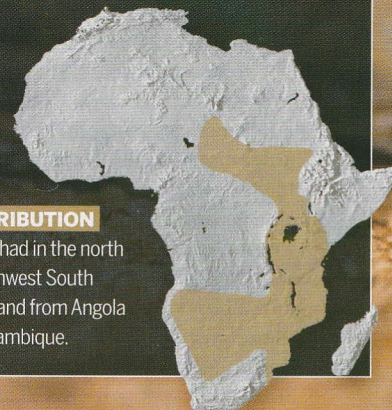
HABITAT Primarily savannas and woodlands in low-lying regions with moderate to dense scrub. The species is also found in floodplain grassland, on rocky slopes and sandveld.

THREATS Listed as Vulnerable by the IUCN. Numbers are declining due to poaching. They are also impacted by habitat loss due to farming and electrocution from fencing.

POPULATION South Africa is estimated to have 16,300–24,100 mature individuals but abundance in other regions of Africa is unknown.

DISTRIBUTION

From Chad in the north to northwest South Africa, and from Angola to Mozambique.





An animal on the edge

All eight species of pangolin are threatened with extinction. Of the four Asian species, the Chinese, Sunda and Philippine species are Critically Endangered, while the Indian species is Endangered. Their cousins on the African continent – the black-bellied pangolin, giant ground pangolin and ground pangolin – are all classed as Vulnerable, while

the white-bellied pangolin is Endangered. Aiming to highlight the plight of African species, Pangolin.Africa released a powerful free-to-view film, *Eye of the Pangolin*, capturing all four species on camera for the first time. The film will be translated into African languages and shown in high-poaching areas across the continent. pangolin.africa/the-film

bird's gizzard. To protect themselves from ant attacks, a third eyelid closes across the eye and they stop breathing when they delve into a nest, sucking up the insects as if they're drinking from a straw.

Lisa first started walking with pangolins when she rescued Negomo 25 years ago. "Her smell was intense, she had bubbles coming out of her nose, which wasn't good. I'd never seen a pangolin before, so didn't know what to do," she confesses. "But that little lady was the most patient I've ever come across. She taught me everything I know about pangolins. I didn't want to mess up her system with the wrong diet, so I walked with her while she foraged."

Three years later, they released her. "That was a rollercoaster of emotions," Lisa recalls. "But seeing a pangolin in the wild – nothing can prepare you for that."

Lisa is at pains to stress that their rescue centre is a controlled environment, not captivity. Every pangolin has a carer or minder until they're ready to return to the wild. They sleep in wooden denning crates with blankets, all dark and comforting like a burrow and, for about four hours a day, they forage on their natural diet, with carers following them wherever they care to go.

"Few pangolins survive in captivity," Lisa tells me. "There are three issues: their diet, their sensitivity and their stress factor – they should never be in captivity. In our rehab, they get to think like pangolins again and they get their psyche back on

track. Our whole aim is to get them back in the wild, however long that takes."

Not meant for a cage

But wild places are becoming ever scarcer and more vulnerable, threatened by human encroachment. The THF is vehemently against animals being kept in captivity.

"Today, people are more inclined to go 20km down the road to see a pangolin in a cage than go on a once-in-a-lifetime trip to Africa and experience that romantic, mystical, beautiful journey to see animals in their natural environment," Lisa opines. "We're losing so much of the essence of the





Zimbabwe is one of the most proactive countries in Africa when it comes to pangolin conservation.

Left: in an attempt to let the pangolins lead as natural a life as possible while at the foundation, carers simply walk alongside the creatures as they forage for food.

Below: keeping a beady eye out for a tasty snack of ants among the leaf litter. **Bottom left:** this species' tongue can be more than 40cm long.



wild – we should be respecting these wild animals and that means protecting wild spaces. If we have no safe wild places to release them, we have a problem.”

The best way to help preserve Africa's wild places is to visit them. Zimbabwe has a rich tapestry of parks and reserves well suited to a pangolin's lifestyle: you could see them in any one of its national parks – you'd be very lucky but it is possible.

Take Mana Pools in northern Zimbabwe on the banks of the mighty Zambezi, with riverine woodlands, ancient acacias and mahoganies. Known for its packs of painted wolves (or wild dogs), it offers a rare freedom in the bush, allowing visitors to walk, canoe, camp and drive, even without a guide. The beauty of this park is that, not being confined to a vehicle or a road, your chances of seeing pangolins are enhanced.

In western Zimbabwe, Hwange National Park is part of the Kavango–Zambezi Transfrontier Conservation Area (KAZA TFCA), the largest transborder protected landscape in the world. Renowned for herds of elephants, it also harbours pangolins.

And Gonarezhou National Park in the south, with its wild landscapes and terracotta-coloured Chilojo Cliffs, has had recent sightings. When I arrive at Chilo Gorge Lodge, my guide is introduced to me as ‘the pangolin man’ – he'd seen two pangolins in different locations in as many weeks. And the local Shangaan chief had recently been handed a pangolin near the park. Traditionally, people regarded pangolins as a delicacy and the chief would claim ownership, eating the meat and using the scales in medicinal or supernatural practices. But this chief handed it in to the

park warden, a sign of changing perspectives and of hope for the future.

On game drives we spot elephants, nyala, eland and hyena but, all the while, I'm looking for pangolins. Only now do I appreciate how well they're camouflaged – branches, rocks, leaves, dead palm husks, even piles of elephant dung can look surprisingly like a pangolin. They elude me once again. You may never see one, but if you do, it should be out here in the wild, where they belong. 🐾



SUE WATT is an award-winning writer specialising in African wildlife. For this feature, she travelled with Africa Conservation Travel.

FIND OUT MORE Pangolin facts: discoverwildlife.com/pangolins