

Zambia's Bangweulu wetlands is deemed the best place in Africa to spot one of the birding world's most sought-after prizes: the quirky, prehistoric-looking shoebill. Gliding along its tranquil floodwaters, I chat to Tresford Mbuze as he poles our dugout canoe. "Do you really think I'll see shoebills here?" I ask, just before we arrive at the conservation manager's office at Chikuni. "Maybe..." he replies with a wry grin.

Later I spot a very tall, grey bird standing so still it could have been one of those chic garden ornaments made of steel. Suddenly it moves, waddling towards us as our canoe slides onto dry land. "Meet Russik," Tresford smiles, introducing a gawky young bird with scruffy feathers, spindly legs, an enormous beak and vivid yellow eyes.

Russik is one lucky shoebill. Stolen by fishermen as a chick, he was rescued from a life in captivity by Zambia's

Department of National Parks and Wildlife (DNPW) in Lusaka and brought to Bangweulu to be released in the wild. His new home must seem like paradise.

Bangweulu means "where water meets the sky". Spanning 6,000km<sup>2</sup> of north-eastern Zambia, its beguiling wetlands are a designated Ramsar site and a BirdLife Important Bird Area: some 680 species of bird have been recorded in its seasonally inundated grasslands and swamps. "Everything here moves with the water levels: birds, animals, people, fish," explains Carl Huchzermeyer, Bangweulu's conservation manager. "It's like a huge shallow lake with a shoreline that moves up to 20km between seasons."

Zambia's answer to the Okavango Delta has myriad avian stars, including wattled cranes, swamp flycatchers and blue-breasted bee-eaters, but its shoebills steal the show. Classed as Vulnerable, these strange birds are unique to Africa, with the Sudd ►

# DOING WHAT FITS THE BILL

One of the world's oddest birds, the aptly named shoebill, is thriving in Zambia's wetlands. Sue Watt meets a charismatic giant.

A statuesque shoebill stands guard as vultures fight over a black lechwe carcass in Bangweulu wetlands, Zambia. This tall wading bird is named after the shape of its large bill, which it uses to catch fish in the swamp.



Above: shoebills have a hooked beak that helps them catch prey such as African lungfish. Below: Russik was rescued from a life in captivity and has had to learn how to fish.

wetlands of South Sudan having the largest population, followed by Bangweulu, and smaller populations in Uganda, Rwanda, Tanzania and the Democratic Republic of Congo. Living in such remote, inaccessible habitats, the species' total numbers are unknown but estimated to be between 5,000 and 8,000.

Some 80–100 shoebills are believed to live in Bangweulu, including six that have been rescued and rehabilitated to life in the wild. Clearly, Russik is still learning the ropes when we meet. Having been hand-fed frozen fish for most of his life, adjusting to feeding himself hasn't been easy.

**PRACTICE MAKES PERFECT**

We watch transfixed as he wades into the channel and stands deadly still for several minutes in true shoebill style, peering down intently. Suddenly he lunges into the water, ducking his head and shoulders and coming up just seconds later with his enormous clog-shaped beak full of grass but empty of fish. Looking strangely sheepish and making weird 'eh-eh' vocalisations, he walks to Carl, who acts as carer to the confused 18-month-old bird. "The first time I showed him a catfish, he was scared of it," Carl comments.

"Russik is completely imprinted," he continues. "Psychologically, he thinks we're all the same – either we're all shoebills or he's human." In time

**THE SHOEBILL HAS BEEN CONSIDERED TO BELONG TO THE STORK, HERON AND PELICAN FAMILIES. IN FACT, IT IS THE ONLY MEMBER OF THE BALAENICIPITIDAE.**

– when he's learned to be a shoebill – he should be very efficient at fishing: they are perfectly designed for it.

Shoebills stand motionless in the water, often for hours on end, their very long toes helping to spread their weight and to move undetected. Their sharp vision means they can spot the slightest movement even in murky waters or grassy riverbeds. The huge, razor-sharp bill for which they are renowned enables them to quickly snatch the fish. They then flap their wings vigorously to help tug their catch out of the water, often with a beak-full of grasses and roots. The hook on the tip of the bill prevents their slippery feast from escaping as the shoebill sheds the grasses then cracks the fish's skull and swallows it whole in a single satisfying gulp. Shoebill taxonomy has long been debated: the giant has been variously considered to belong to the stork, heron and pelican families. In fact, it is monotypic, or the sole member of its family, Balaenicipitidae. Growing up to 1.5m tall, these solitary birds come together only in the breeding season and can live up to 25 years in the wild.

Threats to their survival include losing their reed and papyrus habitat through fires and human encroachment and being stolen from nests to be kept as pets or to be sold to private collectors as part of the lucrative illegal wildlife trade.

In 2008, the leaders of the six chiefdoms that collectively own Bangweulu Game Management Area invited non-profit conservation organisation African Parks (AP) to take on the management of the wetlands, to protect its special wildlife and curtail spiralling poaching and the degradation of its ecosystem.

**COLLECTIVE APPROACH**

It was a tough challenge. AP works in partnership with Zambia's Department of National Parks and Wildlife (DNPW) and the six chiefdoms' Community Resource Boards in an unusual system of co-governance that focuses on community-driven conservation. Unlike most of the 10 reserves that AP manages across Africa, Bangweulu is home to some 65,000 people and the fishermen and families that live here are as much a part of the essence of this place as the reeds and swamps and waterlilies. It's real, living Africa – not perfect or pristine, but true.

"Local fishing communities utilise the swamps to earn a living, sharing the space with shoebills. They know the wetlands intimately," Carl tells me. "And

Predation: Cheryl; Samantha Overt/naturepic.com; cutout, dugout, & lechwe: Will Whitford; silhouettes: Morgan Trimble/Alamy

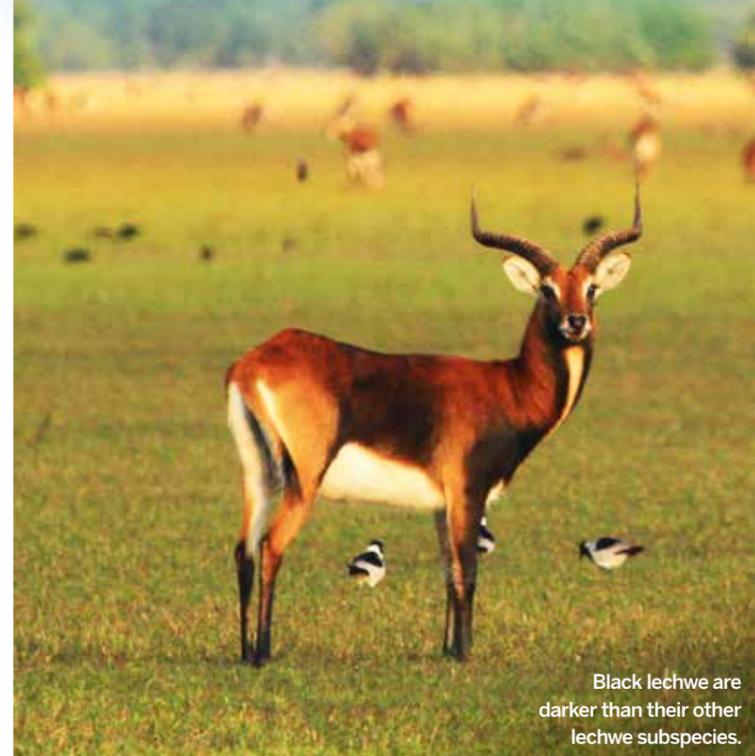


**BANGWEULU'S BLACK LECHWE**

Shoebills aren't Bangweulu's only conservation success. The wealth of resident mammals includes zebras, buffalo, sitatunga, reedbuck, oribi and tsessebe, but one antelope here is particularly special: the black lechwe. One of three lechwe subspecies, it is found nowhere else and is classed as Vulnerable; over 250,000 once roamed these floodplains, but poaching and habitat loss reduced their numbers to a mere 30,000. Last year, however, following improved law enforcement as a result of African Parks'

management, an aerial census revealed a population of 50,000, a staggering 45 per cent increase.

As the waters start to recede from April onwards, Bangweulu's Chimbwi plains are awash with black lechwe as far as the eye can see: herds in their thousands relish the fertile, nutritious grasses the floods leave behind. They're perfectly suited to living on swampy ground, with thick and oily water-repellent coats, powerful hind legs and long hooves that spread broadly, enabling them to traverse grasslands with ease.



Black lechwe are darker than their other lechwe subspecies.

Above left: Bangweulu's fisheries monitors Tresford and Elijah commute to work in a fibre-glass canoe. They help protect shoebills from traffickers. Left: you can only see black lechwe in Bangweulu.

they're easily tempted by traffickers to locate, steal and transport chicks out of the swamps. But we realised these fishing communities could also be key allies in our efforts to protect the birds." Getting communities onside took some convincing. Initially they were resentful of AP, deeming the organisation to be damaging their livelihoods by enforcing crucial three-month fishing bans during the spawning season and preventing fishing with mosquito nets and other illegal practices.

AP appointed three community development facilitators to work with the fisheries committees, helping to sensitise local people to sustainable fishing and persuade them of the long-term value of conservation. Diminishing fish stocks are now thriving again, and, in an area remote from government services, AP has brought other benefits, including a new community





## DID YOU KNOW?

- Early Arab traders that encountered the shoebill in the marshlands of the Upper Nile, called it abu markub, meaning “father of the shoe.” Its scientific name, *Balaeniceps rex*, is no less descriptive and translates as “king whalehead”.
- The bird’s powerful and sharp bill is perfectly adapted to prey on fish in aquatic vegetation. Shoebills will also opportunistically feed on frogs, young turtles, snakes and other small animals.
- These birds generally breed in the dry season when prey is easier to find as water levels fall – they will normally lay two eggs. Displays include soaring and bill clattering.
- Outside of the breeding season, shoebills live solitary lives and hunt alone. These masters of stealth and surprise move to a different fishing spot after each catch.



Above: the wingspan of a shoebill can measure up to 2.6m. Top right: a shoebill forages in a wetland. Bottom right: during the fishing season, fisherman temporarily live in huts around Bangweulu.

fishing market, improved roads and better schools and clinics, along with new income-generating initiatives such as bee-keeping and a community campsite.

“It’s taken seven years slowly, slowly getting people to understand African Parks,” Elijah Mofya, one of the community development facilitators, tells me. “Now, about 70 per cent support it, they’ve seen the project develop and they love it.” They’re also learning about the importance of shoebills. “We spread the information through schoolchildren in environmental education classes,” Elijah explains. “And they pass it on to their parents.”

### FISHER FRIENDS

AP came up with an innovative solution to the birds’ survival: Bangweulu’s fishermen have become shoebill guardians. They report nests and eggs they’ve come across, protecting them until the chicks fledge, usually within three months. For the additional income they receive on fledging, the guardians’ duties involve checking the nests regularly, watching out for suspicious activity or people, educating others on shoebill conservation and preventing fires. “Since the shoebill guardian programme began in 2012, we’ve successfully protected 21 nests with a total of 25 chicks,” Carl says.

Viewers of BBC One’s spectacular series *Africa*, screened in 2013, might recall the tragic footage of an older shoebill chick viciously attacking its weaker sibling, which is then abandoned by the parents and left to die. Such siblicide is a common scenario, with the second chick believed to be an evolutionary ‘back-up’ in case the first dies. But it doesn’t always happen. It’s evident from the guardian programme’s statistics that more than one chick survived in some nests. “Some pairs

**BANGWEULU’S FISHERMAN HAVE BECOME SHOEBILL GUARDIANS. THEY REPORT NESTS AND EGGS THEY COME ACROSS AND PROTECT THEM.**

Above: a man pushes his bike underneath a tree, unaware that a shoebill sits above him. Right: Seymour is being hand fed by a volunteer in a shoebill ‘disguise’. The grey cloak hides human features to prevent the chick from imprinting.



are successful at raising both chicks to adulthood, although it’s rare,” Carl says. “It all depends on whether the parents can bring enough fish.”

The guardian programme hasn’t been without problems. From a record year in 2014 of 11 chicks fledging from nine nests, last year produced just one nest and a solitary chick. “2016 was a particularly bad year: low reporting rates from the communities indicate fewer nests in the usual areas,” says Carl. “This is possibly due to drought and disturbance from overzealous people hoping to become shoebill guards, causing pairs to abandon their eggs. Some chicks are killed by natural predators. Others have gone missing, probably stolen, and there was an upswing in trafficking that’s been brought under control again.”

### SOLVING THE CRIME

The Zambian authorities are certainly taking trafficking seriously. In September 2016, a man was sentenced to five years’ imprisonment with hard labour for illegal possession of a shoebill. The chick was named Watson in honour of detective Sherlock Holmes’ trusty partner and in recognition of the investigation to recover the bird, led by DNPW and supported by GRI-Wildlife Crime Prevention Unit, part of the Zambian conservation organisation Game Rangers International.

That sting operation then led to the imprisonment of another key player in the illegal wildlife trafficking market and the recovery of a second shoebill. He was later called Bandit, his name inspired by his association with the arrested suspects. Happily, both chicks thrived under Carl and his team’s care in Bangweulu and are being rehabilitated so they can return to the wild in the future.



Shoebills draw tourists to Bangweulu, although only around 300 visit each year, with local fishermen acting as their guides to spot the elusive, enigmatic birds. “On average, we’ll see shoebills on 80 per cent of our trips,” Carl tells me as we venture out by boat along lily-strewn waterways to the Bulanda swamps, an area favoured by the birds. It isn’t long before we see two flying in the distance – even from quite far away their wingspan, often measuring up to 2.5m, looks enormous.

We chat to a woman outside a fisherman’s hut made of reeds and thatch, one of hundreds scattered around the wetlands as temporary homes during the fishing season. She reveals that she’d seen a shoebill earlier that morning on a tiny island nearby. On cue, the bird suddenly appears out of the papyrus around 100m away, his wings flapping laboriously as he flies away. Fortunately, he doesn’t fly far and we follow in our boat to his landing spot on a grassy mound surrounded by papyrus. Keeping a respectful distance, we watch him in silence while he does what shoebills do best – standing as still as a statue, peering into the inky blue water. He looks impressively commanding and majestic.

“I think that’s Seymour,” Carl whispers. “He was just a small chick when we got him and we raised him very carefully so as not to imprint him. We even fed him wearing a shoebill costume, a grey cloak that hides all human features. He flew off to the Democratic Republic

# SHOEBILL

of the Congo for a while but he's back now and he's completely wild again – we can't get near him. He's been a great success for conservation."

Since my visit, Russik too has become a conservation success. For a while he would return intermittently to Chikuni, but having grown in confidence and now foraging for himself, he is back in the wilds of these beautiful wetlands where he belongs. 🐾



**SUE WATT** is a travel writer who frequently visits Africa, and in Zambia was a guest of African Parks: [www.african-parks.org](http://www.african-parks.org)

Right: shoebill parenting footage featured in BBC One's *Africa* series.

#### ➕ FIND OUT MORE

Watch a video of a shoebill roaming the swamps for fish to feed her chicks: <http://bbc.in/2lfUxYU>

## HOW TO SEE ZAMBIA'S SHOEBILLS

### WHEN TO GO

The best times to see shoebills are between April and June, or in the breeding season from August to October. Rains start in November and the plains are flooded from January to April, drawing myriad migratory birds. From May the floods start to recede, attracting black lechwe and other mammals; by October, the plains are parched.

### HOW TO GET THERE

Kenya Airways, South African Airways and Ethiopian Airlines fly from London to Lusaka via Nairobi, Johannesburg and Addis Ababa respectively. From Lusaka, it's an 11-hour drive to Bangweulu. An overnight stop at Forest Inn ([www.forestinn-zambia.com](http://www.forestinn-zambia.com)), 30km west of Mkushi, would be worthwhile.

### TOUR OPERATORS

Wildlife tour operators offering trips to Bangweulu include Expert Africa ([www.expertafrica.com](http://www.expertafrica.com)), Steppes Travel ([www.steppestravel.co.uk](http://www.steppestravel.co.uk)), and Safari Consultants ([www.safari-consultants.com](http://www.safari-consultants.com)). For more tour operators visit [www.zambiatourism.com](http://www.zambiatourism.com).

### WHERE TO STAY

The only fully catered camp in Bangweulu is Shoebill Island Camp (<http://shoebillislandcamp.com>) due to reopen in mid-2017 following refurbishment. Or stay at the simple Nsobe Community Campsite ([www.nsobegamecamp.com](http://www.nsobegamecamp.com)) on the Chimbwi plains – you'll need to bring your own equipment and supplies; contact African Parks by visiting [www.african-parks.org](http://www.african-parks.org) or emailing them at [bangweulu@african-parks.org](mailto:bangweulu@african-parks.org).



HE'S BACK NOW AND HE'S COMPLETELY WILD AGAIN. WE CAN'T GET NEAR HIM. HE'S BEEN A GREAT SUCCESS FOR CONSERVATION.

Shoebills fly with their neck curved over their back in order to support the weight of their head.

