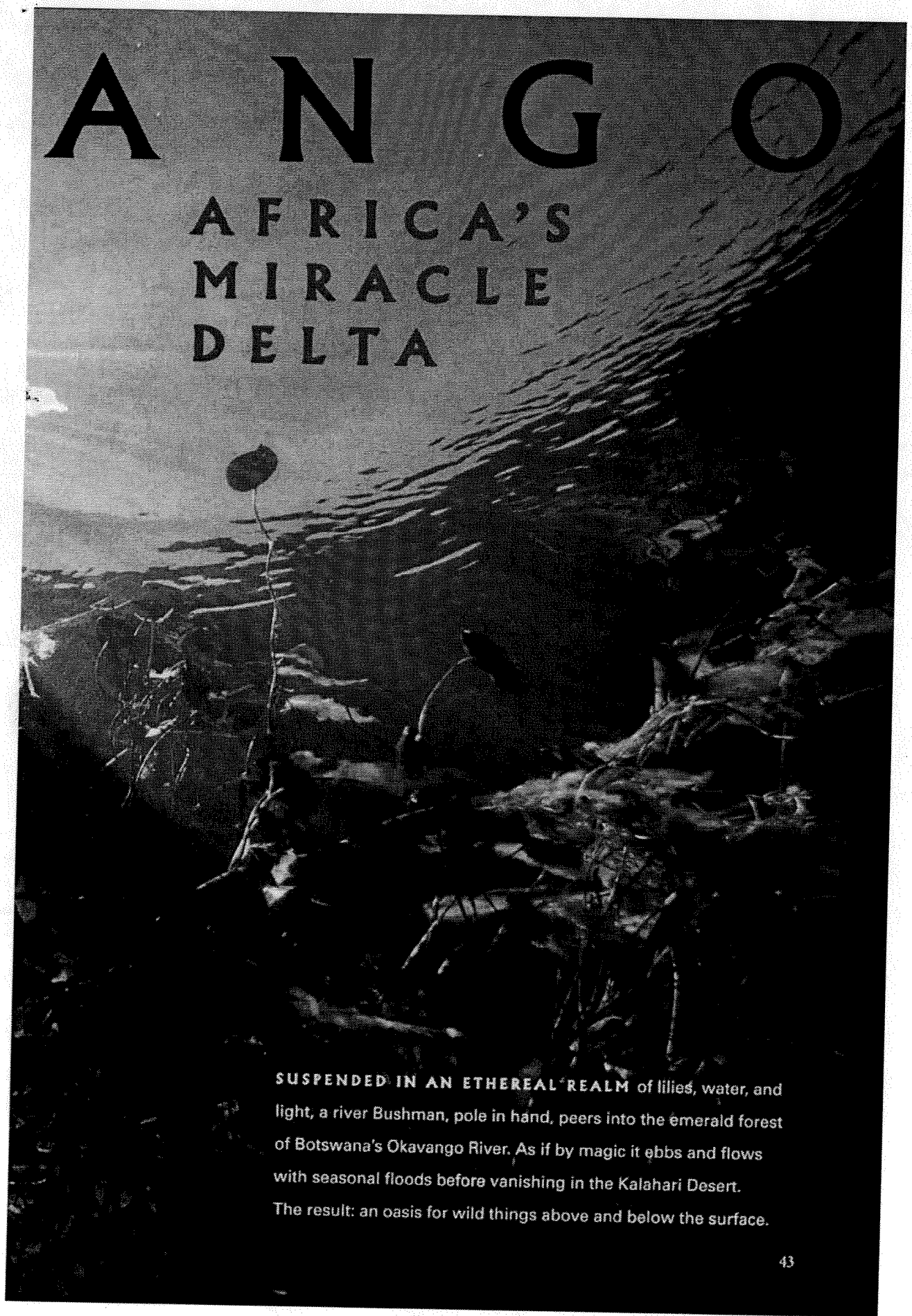


OKAVANGO

AFRICA'S MIRACLE DELTA

SUSPENDED IN AN ETHEREAL REALM of lilies, water, and light, a river Bushman, pole in hand, peers into the emerald forest of Botswana's Okavango River. As if by magic it ebbs and flows with seasonal floods before vanishing in the Kalahari Desert. The result: an oasis for wild things above and below the surface.

BY KENNEDY WARNE

PHOTOGRAPHS BY DAVID DOUBILET

THE MIRACLE IS THIS:

Under cloudless skies at the driest time of Botswana's year, when rain is both a fading memory and a distant promise, a flood comes to the Okavango Delta. Generated by rainfall 500 miles and two countries away in the highlands of Angola, the flood wave snakes down the Okavango River and spreads across the delta, swelling its lagoons and channels and spilling outward to inundate its floodplains. In a land withered by drought, this gift of water is like unction, and all nature responds to it.

The miracle happens in slow motion, for this part of southern Africa is so flat that the floodwaters take three months to reach the delta and four more to traverse its 150-mile length. Yet by the time its force is spent, the flood has increased the Okavango's wetland area by two or three times, creating an oasis up to half the size of Lake Erie at the edge of the Kalahari Desert.

JENNIFER HAYES OPPOSITE: AFRICAN BUFFALO (SYNCERUS CAFFER)

The flood moves on multiple fronts like the columns of an army. I caught up with it in an area where P. J. Bestelink and his wife, Barney, run horse safaris. P. J. had tracked the flood's advance to a grassy plain between two channel systems, the Matsibe and the Xudum. The water glided across the heat-shimmering landscape like a silver tongue. Up close it was the color of ginger ale, and it bubbled as it seeped into the dusty hollows and runnels of the soil. Only a few yards back from the tip, small fish swirled along in the current—front-runners of a spawning horde that would soon turn the floodplains into a fish nursery.

Bull elephants came from the south, blocks of basalt moving through the tawny grasses. They lumbered toward the widening ribbon of water, trunks cocked in an *S*, snuffing the sweet elixir. Standing at the water's edge, the thirsty animals sucked up trunkfuls and gushed it into their mouths, spilling barely a drop.

As the seeping floodwater soaked into the thatch of dry grass stalks, it triggered an awakening of frogs that had been dormant in the dry conditions. They immediately began calling, some with loud Geiger-counter clicks, others tinkling like glass bells. P. J. said that catfish too can survive a temporary dry spell—by burying themselves in mud. He knew a place where this happened, a large shallow pan that often dried up in the weeks before the flood's arrival. We drove to a nearby hunting camp and walked across a sun-crisped stubble of grass and rushes

AFRICAN BUFFALO wade through the shallows of the Okavango Delta, a wetland that spreads across northern Botswana. From its source in the Angolan highlands, the Okavango River snakes through the Panhandle (opposite), lined by dense thickets of permanent papyrus swamp.

toward the center of the pan. The broken shells of aquatic snails lay bleaching on the ground. Openbill storks had obviously dined well here as the water in the pan evaporated.

"We're too late," said P. J., as we reached the middle of the pan. The mud had dried up and was littered with catfish skeletons. Some of these fish would have weighed 20 pounds. Marabou storks, known as undertaker birds, picked among the bones for scraps of flesh. The flood was less than a mile away and would soon transform this place into a broad lagoon, but it had not arrived in time to save the catfish from death by dehydration. Their blunt skulls, eyeless and desiccated, underscored the central truth of the delta: Water is life.

From space the Okavango Delta looks like the footprint of a bird. Water flows into the system through the leg, called the Panhandle, a strip of land 60 miles long and 9 miles wide along which the Okavango River meanders in lazy loops. Forward-pointing toes—six of them—channel water through the delta and, ultimately, into the sands of the Kalahari. I set out to follow this journey of water in flood tide and ebb, above water and below, from source to sand.

The delta's deepest, most diverse underwater habitats lie in the Panhandle. The flood peaks here in April, raising the level of the Okavango River by six feet. In May the level has started to drop. Sediment borne on the flood wave has settled, and the water in Ncamasere channel, an offshoot of the main river midway down the Panhandle, becomes clean and clear.

THE BAYEI PEOPLE SAY: "I AM THE RIVER. MY SURFACE GIVES YOU LIFE. BELOW IS DEATH."

And deadly. The waters of the delta are full of crocodiles. The Bayei people, one of several Okavango tribes, say as much in a poem they teach their children: "I am the river. My surface gives you life. Below is death." For photographer David Doubilet and me, going below the surface was an essential part of our work. We wanted to see the delta as few had dared to see it before—a croc's-eye view. People in passing boats, noticing our wet suits and scuba gear, didn't hesitate to give their opinion on croc-watching: They tapped their temples as if to say, you're out of your minds. Perhaps we were, but it was winter, and we reasoned that because crocodiles are reptiles, their metabolism would be sluggish. Torpidity was certainly to be hoped for in a 15-foot reptile with teeth as big as thumbs.

The larger crocodiles spent much of the day basking on the riverbanks in well-used haul-outs, usually with chutes down which they slid into the water if disturbed. Some lay with their mouths open, a behavior once fancifully thought to allow a "cleaner" bird to pick the meat from between their teeth but now considered an aid to regulating body temperature and a way of relaxing jaw muscles. In the cool of the night the warmth-loving crocs came to life for the hunt, floating at the water's edge. Their eyes gleamed blood-red in our spotlight as we motored up the channel.

Although Nile crocodiles are one of only a handful of predators that actively hunt humans, I figured that if I initiated an encounter, thus denying the animal its advantage of surprise, I would retain the upper hand. And so one night I slipped into the water to observe a six-foot croc that had submerged as our boat approached. Pulling myself through a tangle of water lilies, I reached a position directly above the crocodile, then dived down for a closer look.

Magnificent! The vivid black-on-fawn markings; the two lines of upraised scutes on the back, merging into the serrated keel of the tail, jagged as a ripsaw; the gorgeously veined irises of the unblinking eyes; teeth like a white zipper. I was less than two feet from the animal, and my nervous system was awash with the adrenaline of the moment.

The crocodile moved. I followed it through the underwater foliage, playing my torch beam on its squat, muscular legs. Then, with a scythe of its tail, it sped away into the deep.

Crocodiles are the delta's most feared aquatic predator, but locals say that hippopotamuses cause more deaths and injuries. Accidental meetings in narrow channels are often the trigger for an attack. Hippos can bite a canoe in half with one snap of their jaws, and their teeth can

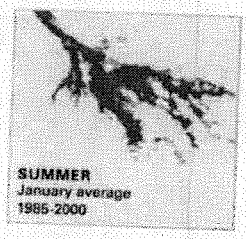
puncture an aluminum boat as if it were a beer can. The two-ton vegetarians aren't slowpokes, either. Guy Lobjoit, an Okavango fishing guide, told me he once had a hippo keep up with him while he was doing nearly 20 miles an hour in his runabout. "The boat was planing, and this thing was pushing up a bow wave right next to me," he said. "Gave my ticker a bit of a flutter."

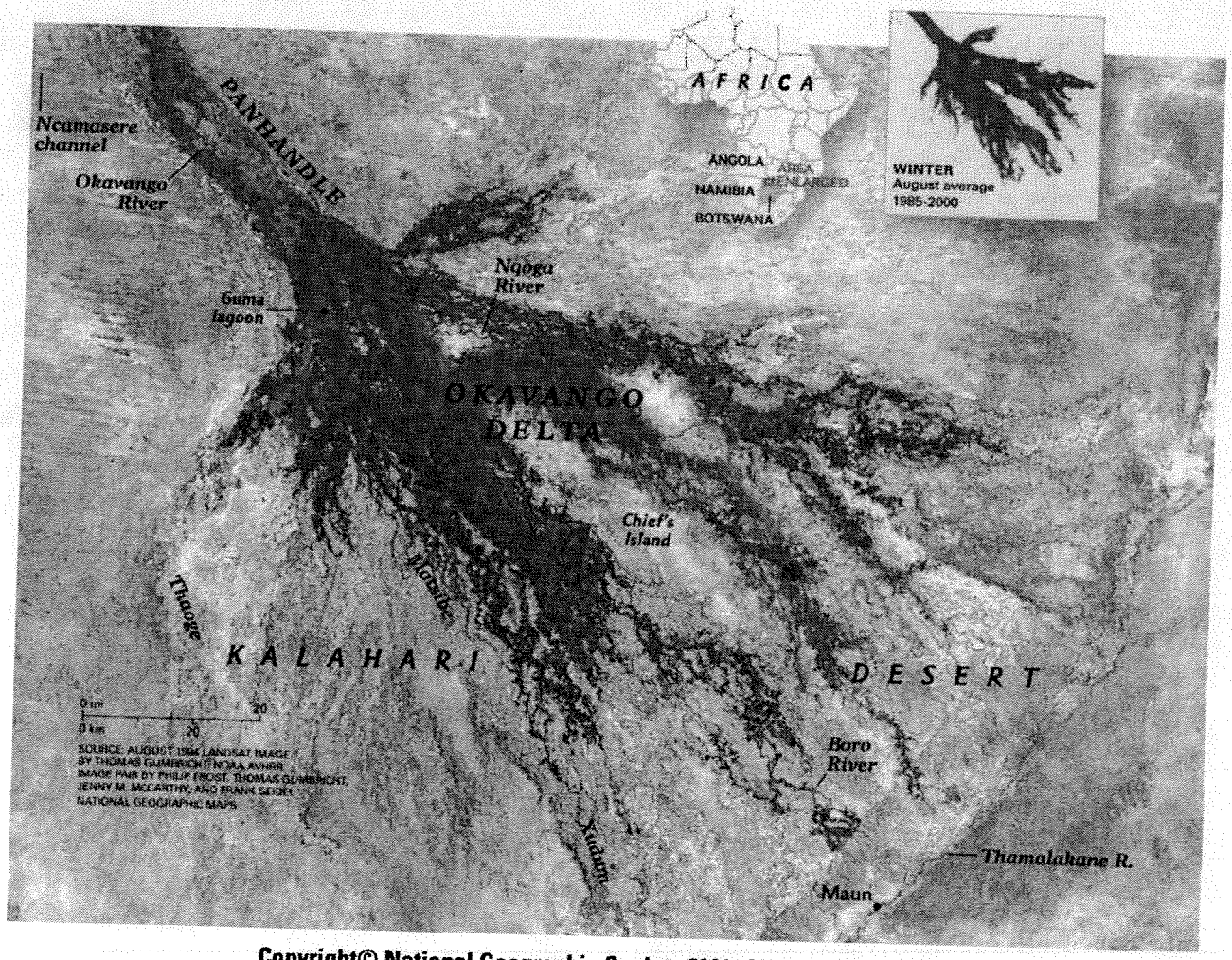
People have been living with the dangers and the bounty of the delta for at least 100,000 years. The seasonal floodplain, the webbing between the delta's toes, is a rich part of the Okavango larder. Here the floodwater forms a lake six inches to a foot deep, dotted with countless islands. The water brings a flush of plant growth, which in turn attracts wildlife into these fertile, sun-warmed shallows. The local people make good use of the *molapo*, as the floodplain is called. During the flood they fish, and in the dry season they graze cattle. All year round they harvest fruits, cut thatching grass and reeds, and hunt game on these productive lands.

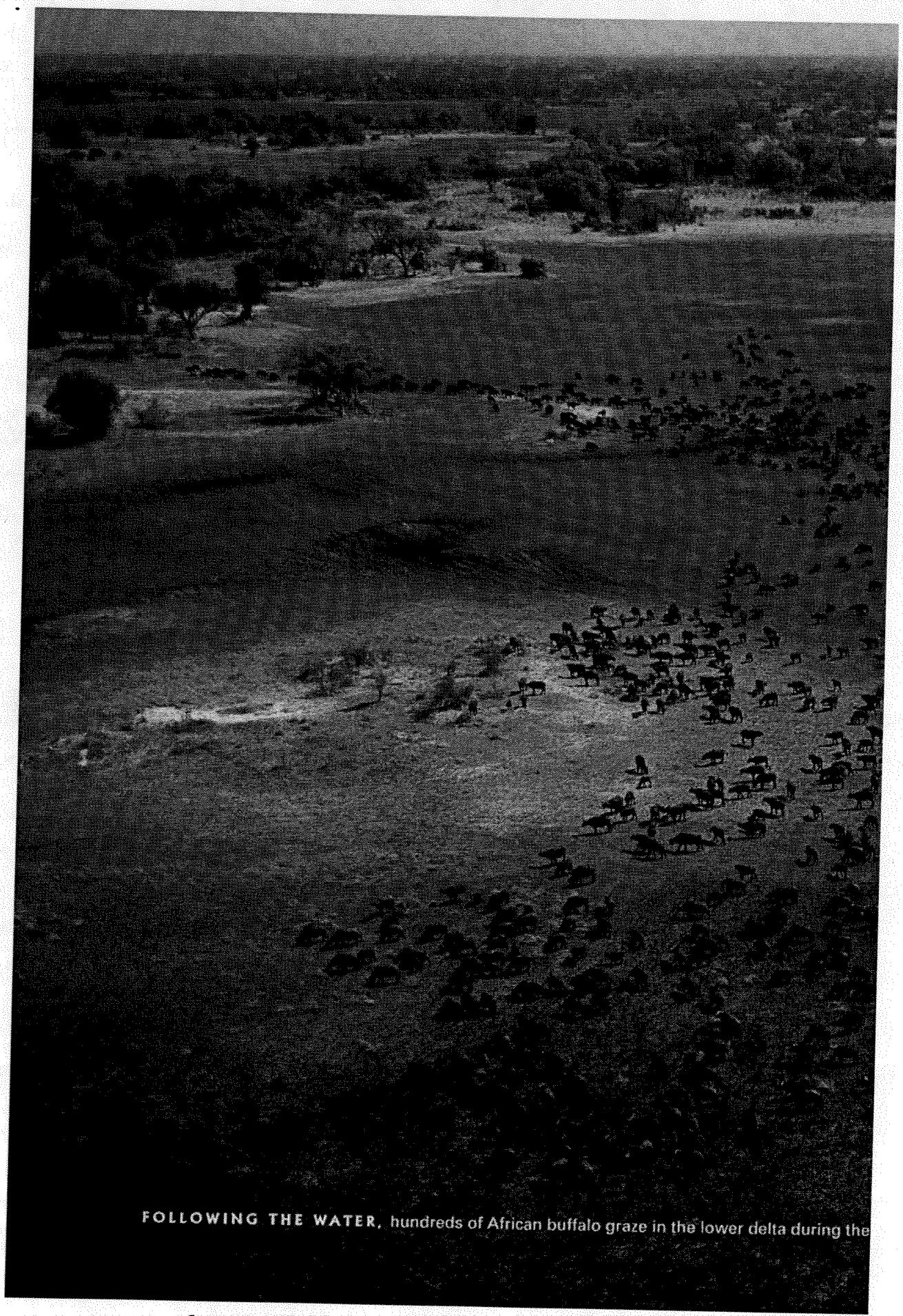
At Guma, near the top of the delta, a Bayei man known simply as Madala, Old One, and a young fishing guide called Fish took me into the molapo during the flood season to show me something of their way of life.

We journeyed by *mokoro*, or dugout canoe, the ubiquitous mode *(Continued on page 59)*

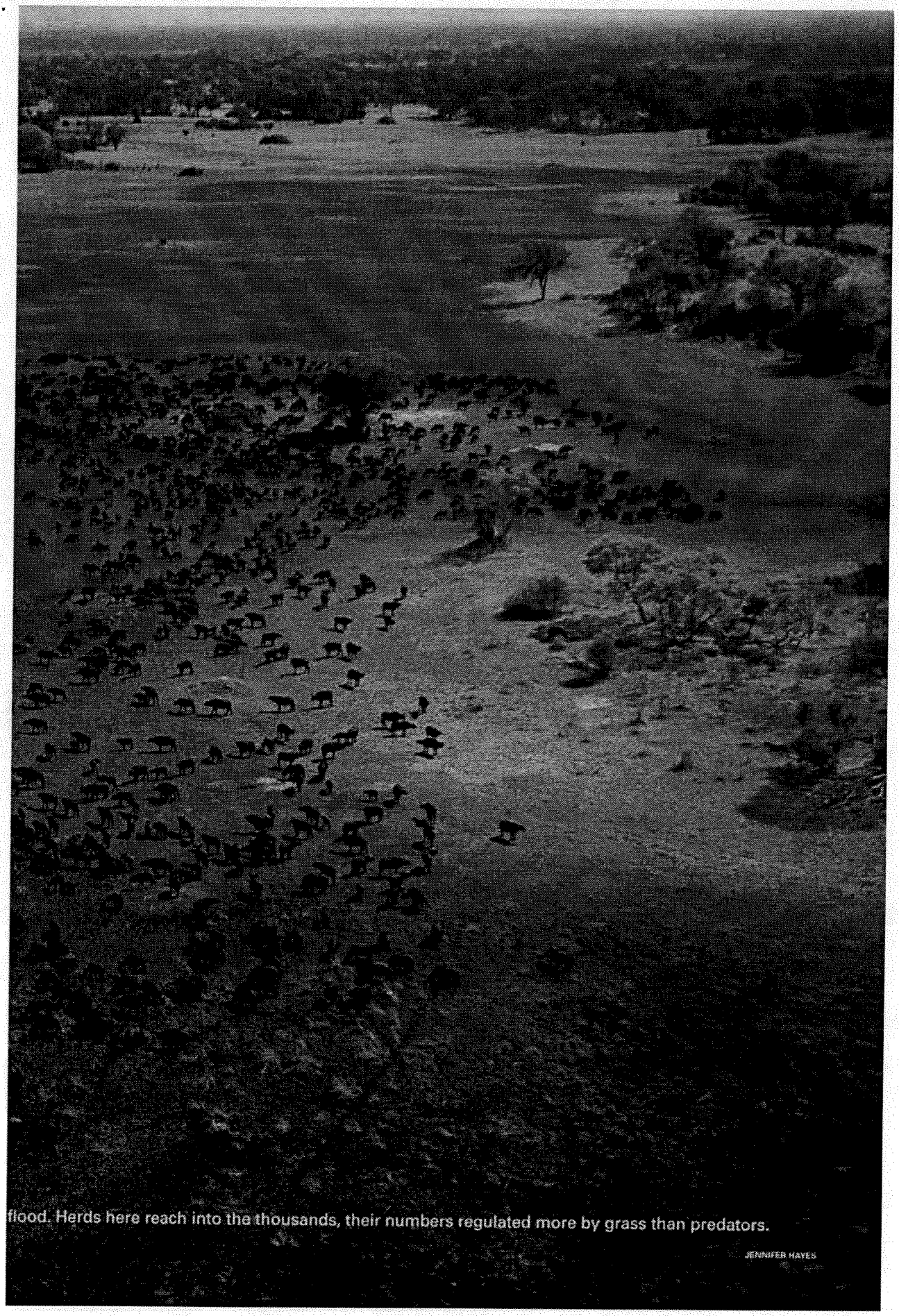
FED BY LOCAL RAINS in the southern summer, the Okavango River swells in winter with a huge pulse of water from Angola, flooding one of the largest inland deltas on Earth—an alluvial fan of more than 10,000 square miles. The flooded area varies widely year to year and season to season (right), creating a shifting landscape of channels and islands that sustain a rich diversity of life.







FOLLOWING THE WATER, hundreds of African buffalo graze in the lower delta during the



flood. Herds here reach into the thousands, their numbers regulated more by grass than predators.

JENNIFER HAYES

SILVER CATFISH (*SCHILBE INTERMEDIUS*), ABOVE; JENNIFER HAYES, AFRICAN JACANA (*ACTOPHILORNIS AFRICANUS*)

SHARP SPINES AND POISONOUS MUCUS are the first lines of defense for silver catfish, which at times are so thick in the channels that local people can catch them in the traditional manner with baskets. A young jacana (below) flees by diving under the lily pads with only its beak protruding for air. The bird's splaying feet, with their greatly elongated toes and claws, enable it to walk where others can't easily tread, earning it the nickname "lily-trotter."

(Continued from page 49) of transport in the delta. The mokoro that Fish poled was made from kiaat, a teak-like timber, with metal patches covering cracks he called its wounds. Madala's canoe was fiberglass. He explained that the new synthetic canoes are more stable than the traditional wooden ones. More sustainable too, as trees suitable for mokoro-making are a limited resource in the delta.

Poling is a hypnotically beautiful way to travel. Each thrust of the wooden pole moved the mokoro through beds of reed and sedge that rustled against the hull. Grasshoppers jumped into the canoe and then jumped back out again. I trailed my fingers in the warm water and studied the microcosmos of water striders, backswimmers, whirligig beetles, and frogs no bigger than a fingernail. Birds called jacanas, or lily-trotters, picked their way across fields of water lilies, dipping the floating pads beneath the surface with each long-toed step. The foghorn snort of a hippo warned us to avoid its channel. A herd of red lechwe, a species of antelope with long hooves adapted for swamp travel, splashed away at full gallop when we came into view.

As we poked along, stopping here and there at wooded islands, Fish would point to various plants and describe their properties. The root of the star apple makes an excellent toothbrush; the bark of the rain tree can be ground up and thrown into the water to paralyze fish; chewed sickle bush leaves are good for treating snakebite. Madala cut a tall papyrus stem and pounded the fleshy white base against his palm to soften it before handing it to me to eat. It was sweet, fibrous, and refreshing, reminiscent of fresh coconut. He gave me the rubbery pith of bulrush to try—Okavango chewing gum, it's called—and pulled up water lily fruits for cooking later.

We made camp under the boughs of a sycamore fig. While Madala set his net in a lagoon thick with water lilies, Fish waded into the floodplain to spear small fish with a porcupine quill. It's a technique small boys learn, along with such tricks as sticking a thorn into a poison apple to make a spinning top. I climbed a baobab tree to collect its maraca-shaped fruits containing a white pulp that substitutes well for cream of tartar. Madala mixed it with water to make a tangy sauce.

That night we rolled balls of cornmeal porridge with our fingers and dipped them in a casserole of freshly caught bream, water lily fruit, and heart of palm. In the firelight Madala told stories about the Bayei people: How, for example, they won't eat crocodile meat because crocodiles eat people. To keep the mosquitoes at bay, Fish lit a football-size lump of elephant dung, which smoked aromatically for hours.

SHARP-TOOTHED CATFISH RAMPAGE UP THE CHANNELS. THEY THWACK THE PAPYRUS STALKS WITH THEIR TAILS.

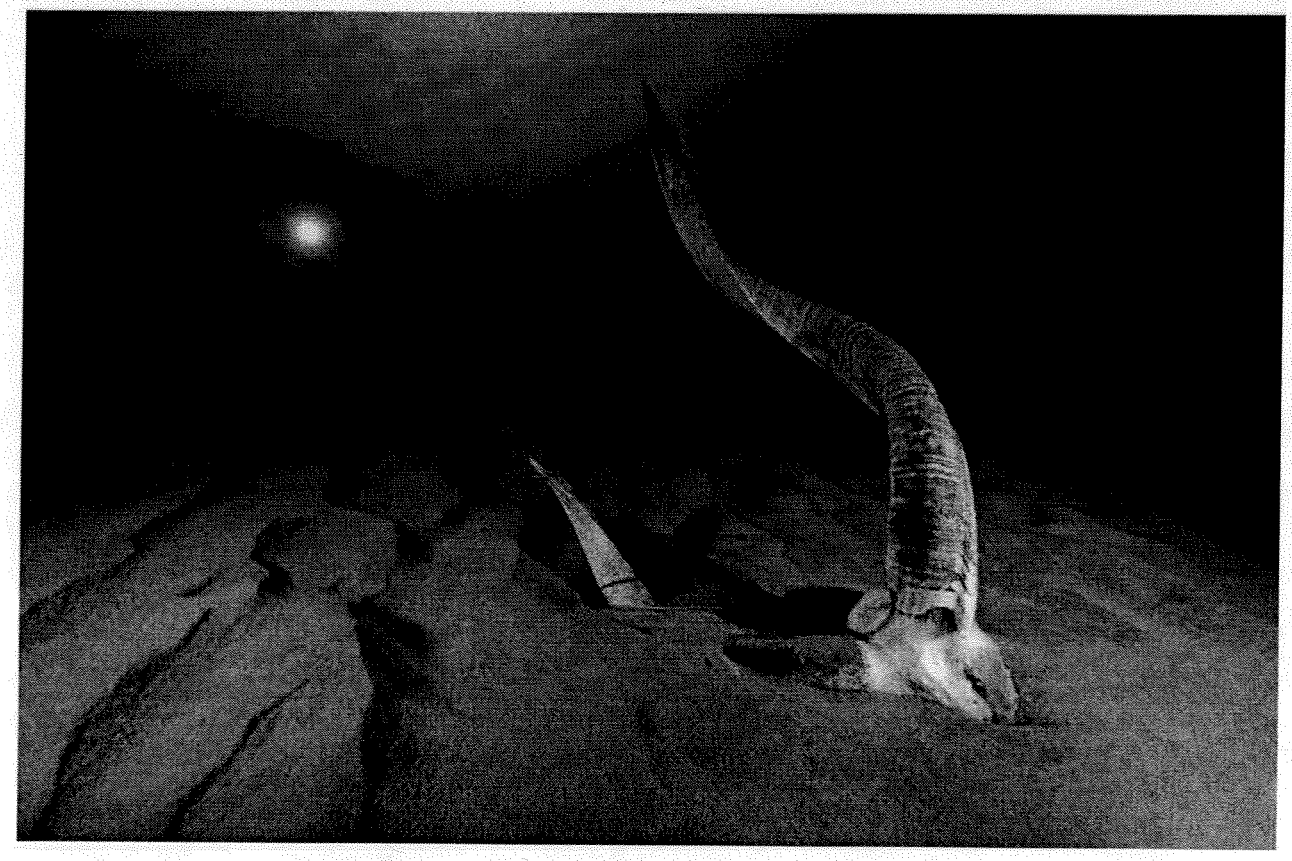
We heard lions in the distance, and I thought of Laurens van der Post's observation that the lion's roar "is to silence what the shooting star is to the dark of the night." The frog chorus rose and fell (though the effect was spoiled somewhat by a group of French tourists on a neighboring island singing "Frère Jacques" at the tops of their voices).

Other than the presence of a few tourists—and a carton of long-life milk for our tea—I suspected that little in this scene had changed since the first European explorers visited the Okavango over 150 years ago.

One thing that has changed—and continues to change—is the path the water takes through the delta. When David Livingstone made his first journey to the region, in 1849, much of the flow was down the western channel system and into Lake Ngami—a "fine-looking sheet of water," according to Livingstone. In the 1880s the water flow, responding to a range of subtle landscape cues, began to favor the eastern channels. The sluggish western channel became choked with vegetation, and Lake Ngami dried up. The Batawana people, Botswana's dominant tribe, followed the water, shifting their main settlement to a lush site on the delta's southern edge. They called the place Maun, "place of reeds." Today Maun is a town of 45,000, with barely a reed to be found. Water flow seems to be moving westward once more, and floods, which follow a natural cycle of

SITATUNGA (*TRAGELAPHUS SPEKEII*, BELOW

IN THE CROCODILE'S LAIR, photographer Jennifer Hayes explores caverns formed by floating mats of papyrus in the deep waters of the Ncamasere channel in the Panhandle (above). Croc tracks were everywhere, says guide Brad Bestelink (below), examining the remains of a big male sitatunga. Bestelink pioneered diving in the Okavango's clear, croc-infested waters, counting on cool winter temperatures to keep the reptiles lethargic. "Any other time," he says, "we'd be lunch."



higher and lower volumes, have diminished in size. The result is that Maun—commercial gateway to the delta—has a water shortage. The place of reeds has become a place of dust.

Not surprisingly, when the annual flood does reach Maun (though there is no guarantee that it will), the whole town celebrates. On a breathless July day—the sky the eggshell blue of the Botswana flag, the air full of the smell of wild sage—I watched as the flood crept down the broad, dry bed of the river that runs through town. Children dug furiously with sticks in the sand to encourage the trickle to run faster. Some leaped back and forth across the steadily widening stream, laughing for joy. Others just let it run over their bare feet, looking at it as if it was the first time they had seen water. "The water is coming," I heard a father explain to his daughter. "The fish are coming. The water lilies are coming. Life is coming."

On a bank of the river, behind a twig fence that didn't look as if it could keep out a goat, let alone a cow or a hippo, a man who told me his name was Flay Million Dube walked around his vegetable plot. With a smile as broad as the straw hat that shaded his eyes, he told me, "I'm not working today because I'm so happy." He had just been down to the river to wash his face and hands in the new water, he said. Tomorrow he would put fresh, cool mud around his beds of spinach, broccoli, and kings onion. Maybe he would win a prize in the horticultural show. The water was late, he said, but it had come, and that was all that mattered.

In a thatch-roofed bar a few hundred yards upstream, Maunites who had driven out from town sipped sundowners and toasted the flood's arrival. "The English discuss the weather; we discuss the water," one told me. "Before it comes, we drink beer and talk about when it will arrive. When it's here, we drink beer and talk about how much has come. When it's gone, we just drink beer and feel sad."

By October the time of sadness has come. The flood has vanished, ten billion tons of water sucked up into the atmosphere whence it came. People cast thirsty glances at the sky, where glowering thunderclouds build in the afternoons, but the summer rains are still two months away. The floodplains dry out, and water levels in the channels and lagoons drop to their lowest levels.

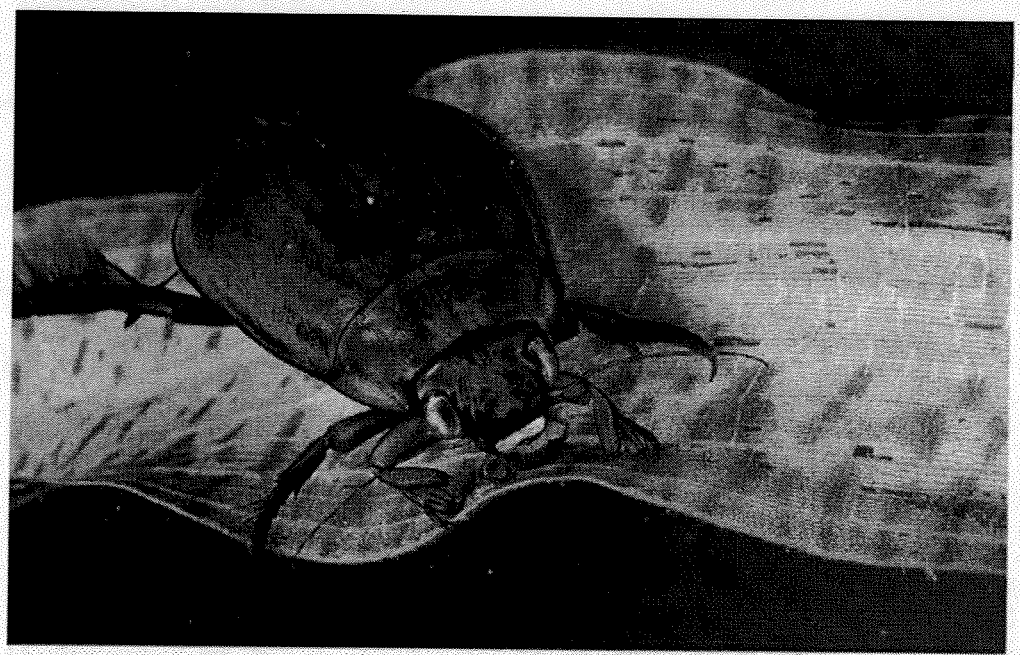
As the delta shrinks, life retreats. Small fish born in the floodplains when the water was high withdraw to the permanent channels, and this influx of flesh triggers an Okavango phenomenon: the catfish run. Sharp-toothed catfish, locally called barbels, rampage up the channels in a noisy, pre-breeding snack fest. They thwack the papyrus stalks with their tails—probably to flush prey fish out of hiding—and gulp air from the surface with an explosive popping sound. Their sinuous bodies churn the water into a thick brown soup.

AT NIGHT THE CROCS CAME TO LIFE. THEIR EYES GLEAMED BLOOD-RED IN OUR SPOTLIGHT AS WE MOTORED UP THE CHANNEL.

Maun broils in temperatures of 100 plus. Hot winds sandblast the town, and the sky becomes white with dust. The tambourine symphony of cicadas is deafening. Maunites call October suicide month. Even the jaywalking donkeys look more weary of living than usual.

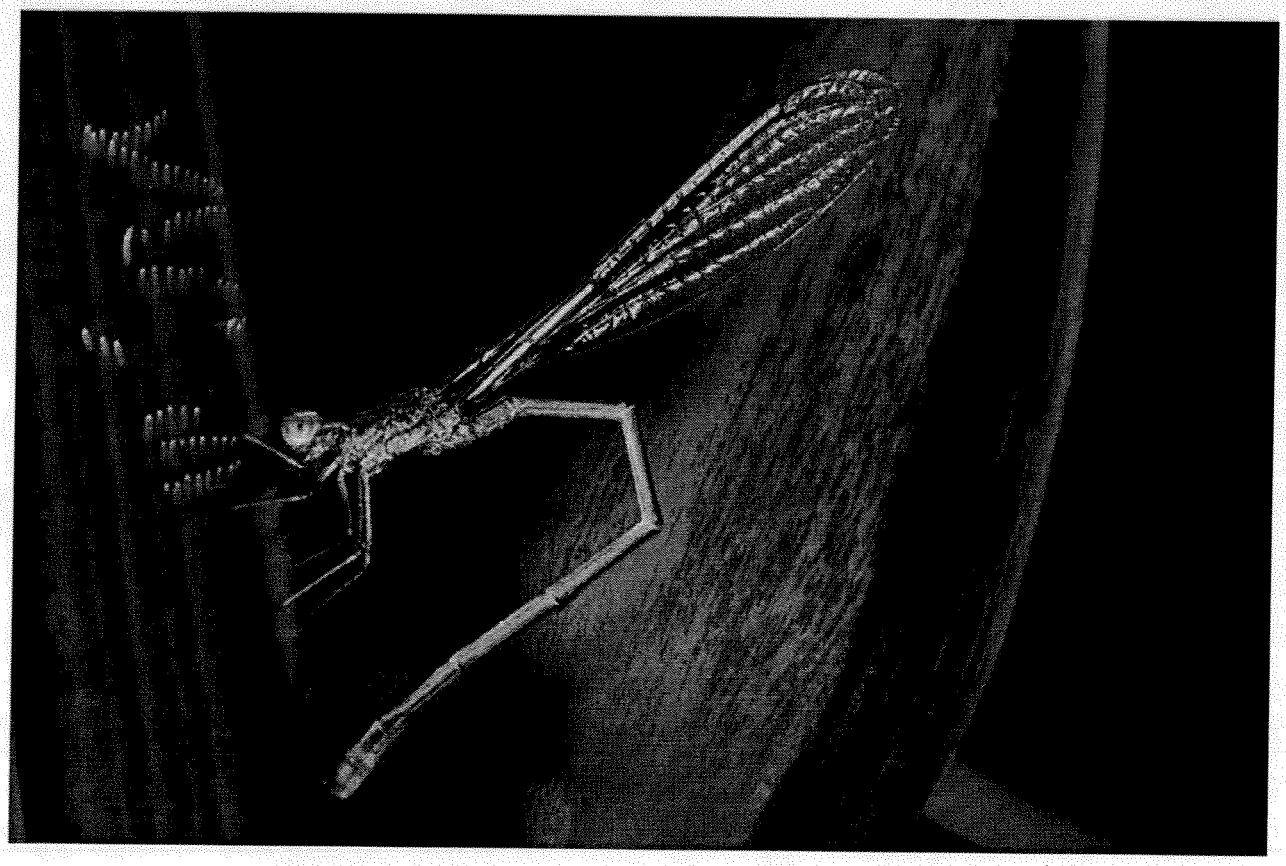
This is the flip side of the flood: the Okavango in ebb. The Thamalakane River, where I had witnessed the arrival of the new water three months earlier, was again bone-dry. Flay Million Dube's garden was bare soil, not a plant to be seen. No children played in the riverbed. Only a few dust devils whirled in the heat haze.

Not since the 1960s has the Thamalakane flowed all year round, delivering water to the delta's outlet, the once mighty Boteti River. Fifty miles southeast of Maun, at a camp called Meno A Kwena—"tooth of the crocodile"—I climbed a hundred feet down the Boteti's crumbling banks to its broad, cracked bed. It was like visiting Ezekiel's valley of dry bones. Strewn about were carcasses of zebras and wildebeest, their sun-blackened skin stretched tight over bone, jaws frozen in a last gasp. These animals, following a genetically imprinted map, had come to this place expecting to drink, but had found a dry riverbed instead. Today all that remains of the Boteti at Meno A Kwena is groundwater, the legacy of floods past. Larger animals can dig for it, but with each successive year of low flood volumes



PREDACEOUS DIVING BEETLE (*CYBISTER* SP.); DAMSELFLY (ZYGOPTERA)

WAITING TO POUNCE, a predaceous diving beetle shines green in the aqueous light. A voracious hunter of tadpoles and small fish, the silver-dollar-size beetle is part of the Okavango's aquatic tapestry of insects. Encased in a silvery skin of air, the female damselfly (below) is equally at home underwater, using her sharp ovipositor to inject eggs into a lily stem. Like the legendary first Bushman, her young will be born on a water lily plant.



the water table drops a little farther out of reach.

David Dugmore, who runs the camp, has made it a personal mission to provide water for at least some of the thirsty animals—which he does by pumping groundwater to fill a small water hole. But he can't afford to keep the pump running continuously, and his is only one small relief station in a vast arid landscape, so animals continue to die. Maintaining the supply line is also a problem, he told me, pointing to lion tooth marks in the black plastic pipe that runs from pump to pool. "The lions are so desperate for water they bite into the pipe, working their way along until they reach the water hole."

IN A LAND WITHERED BY DROUGHT, THIS GIFT OF WATER IS LIKE UNCTION, AND ALL NATURE RESPONDS TO IT.

An hour's drive down sandy tracks brought us to another poignant sight: a pod of hippopotamuses stranded in a syrupy pond. There was no water for miles upriver or down, so the hippos were marooned. There was little grazing to be had in this place of thorn trees and sand, and it was with relief that we saw a wildlife ranger drive up and unload half a dozen hay bales, which he cut open and spread beside the pool. The hippos trotted out of the water and began to munch. Were it not for their daily handout, they would starve.

I wondered how long it would take for this pool to go the way of the catfish graveyard P. J. Bestelink had shown me. And what does it say about the delta that once healthy rivers are drying up? Is climate change casting its long shadow over the miracle delta?

Apparently not, according to hydrologists and climate researchers, who have detected an 18-year oscillation in rainfall in the region and an 80-year cycle of high and low flood volumes. We're reaching the end of the 40-year low part of the cycle, they say, and should see larger floods in the future, peaking in mid-century. Rainfall should also increase over the next few years.

River and rain contribute in roughly equal measure to the delta's water budget. The summer rains have the function of recharging the groundwater aquifer—of priming the system in anticipation of the flood. If the rains are good, little floodwater is needed to bring the water table to the surface, and the bulk of the inflowing water then spills into the seasonal floodplains, creating a large flooded area. If the rains are poor, much of the floodwater soaks into the ground, filling the gap left by lack of rain, and the area of inundation is reduced.

The waxing and waning of water volumes in the Okavango is an expression of natural variability in the system—as organic as breathing. Indeed, Terence McCarthy, a professor in the School of Geosciences at the University of the Witwatersrand, in Johannesburg, speaks of the delta as a living organism, with a circulatory system in which the water channels function as arteries and capillaries.

McCarthy and his colleagues, who have been studying the delta since 1985, have discovered that one of the largest contributions to the life of the delta is made by one of its smallest inhabitants: termites. Termites are a lot more than pasty white bugs that gnaw on dead plants and manage subterranean fungus farms. Their colonies are giant construction companies that have transformed the Okavango Delta from a piece of flat real estate into a mosaic of an estimated 150,000 islands.

It all stems from the termites' need for air-conditioning. Some species build above-ground air vents to control the temperature in their networks of galleries and tunnels. These turrets, sometimes ten feet high, and their surrounding earthworks are above flood level, providing dry, fertile sites on which trees can become established.

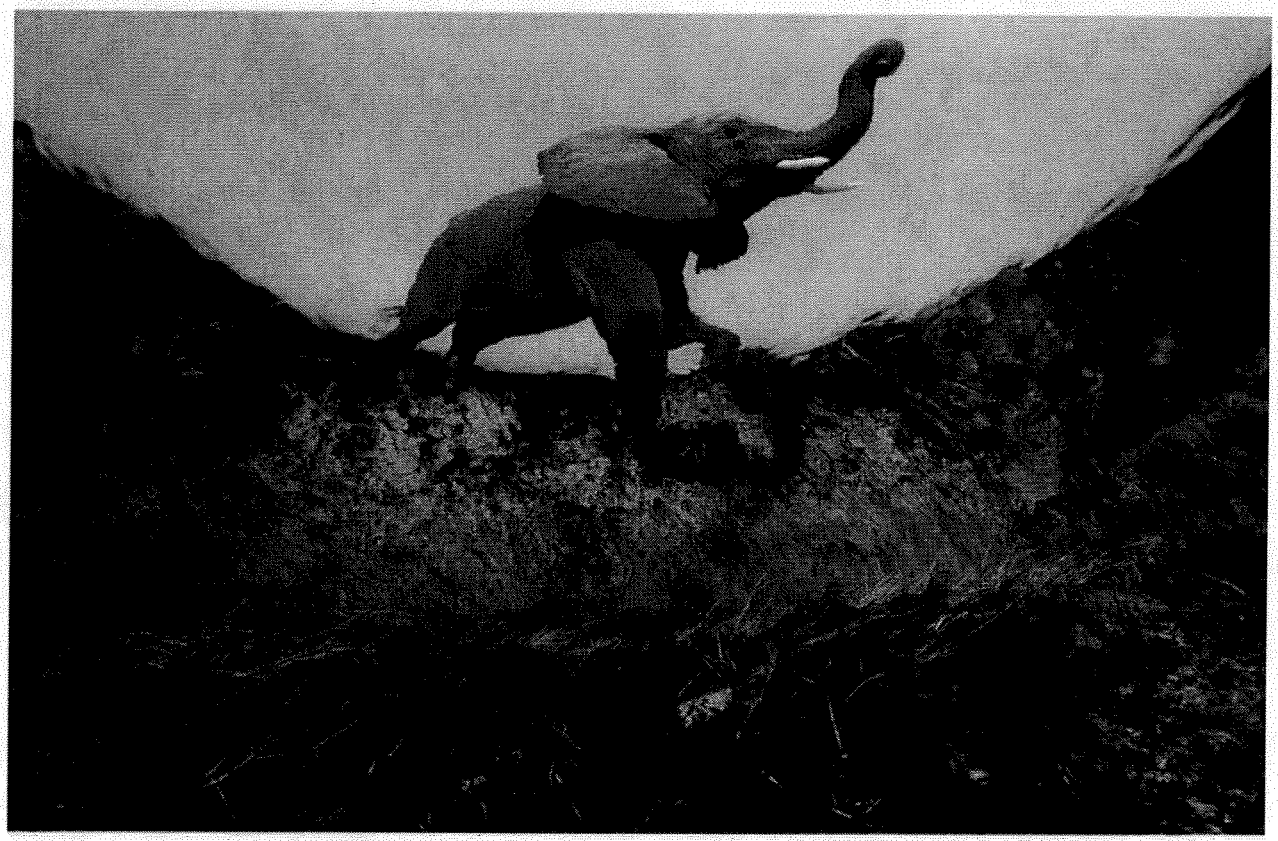
Trees can be thought of as kidneys of the delta, cleansing the system by removing its salts. They do this by sucking water out of the ground and pumping it into the atmosphere by transpiration. In the process, soluble salts are deposited around the tree roots—a "toxic waste storage system," McCarthy calls it. Without the delta's millions of tree pumps (enabled courtesy of Termites Inc.), the 400,000 tons of salts carried in yearly by the Okavango River would be precipitated across the surface of the land, poisoning the delta. By concentrating salts in

the soil and groundwater beneath them, trees not only keep the water in the delta fresh but also expand the size of their island platforms. Thus what the termites start, the trees continue, engineering not just a landscape but an entire ecosystem.

Just as termite mounds are nuclei around which islands form, hippo paths are the precursors of water channels. Most channels in the delta have a life expectancy of about a hundred years. During that time sandy sediment gradually raises the height of the channel bed, slowing the current and allowing the fringing stands of papyrus (which are not rooted in soil but linked together in floating mats) to spread into the channel. Clumps of papyrus eventually break off and jam the channel until, like a clogged artery, it becomes completely blocked.

At this point the hippos come to the aid of the delta's circulatory system, breaking through papyrus jams and forming new channel connections. It is only because the delta is so flat (a gradient of about a hundredth of a degree) that water follows such randomly created corridors. The path of least resistance turns out to be the path the hippos have trod.

Termites, hippos, and papyrus—these three biological influences are part of a system as intricate and responsive as any on Earth. Yet the delta is not immune to human disturbance, even to eventual destruction. The chief threats lie upstream, in the two countries with which Botswana shares the inflowing water. Angola and Namibia both experienced long, brutal wars in the latter part of the 20th century and now look to rivers to help build their economies. Two aspects of development, the increased use of agricultural fertilizers on riverine land and the production of hydroelectricity, could have disastrous downstream effects on the delta. While neither threat is imminent, their potential impact on so finely balanced an ecosystem has many people worried.



REFLECTION OF AFRICA, an elephant trumpets above Okavango's looking-glass waters.

"Fertilizer!" Map Ives, environmental manager for a large Okavango tourism company, spat out the word distastefully. "It's a word I dislike more than any other. Fertilizers have a horrible habit of leaching into waterways. If a lot of phosphate gets into the Okavango River, the papyrus is going to go wild."

Papyrus can thrive in nutrient-poor conditions. Enrichment of the delta through fertilizer runoff from irrigated farmland upstream could cause rampant growth of papyrus and lead to wholesale channel blockage. "If the Panhandle becomes blocked," said Ives, "it's good night Okavango Delta."

Damming the rivers that supply the delta would be equally catastrophic. Namibia's national power utility, NamPower, is studying the feasibility of generating electricity at Popa Falls, just 30 miles upstream of the Panhandle. The scheme is opposed by scientists such as Terence McCarthy, who points out that dams deprive rivers of sediment and that sediment is vital to the functioning of the delta. More than 200,000 tons of it is deposited in the delta's upper reaches each year, raising the channel beds and starting the process of channel switching by which the Okavango renews itself. Without an annual injection of sand, channels would be scoured out instead of built up, becoming ever deeper and swifter. Sandbars, which are breeding sites for threatened birds such as the African skimmer, would disappear. Channel switching would cease. Like limbs that have lost their blood supply, whole sections of the delta would be lost.

In 1996, in recognition of its value as one of the last pristine river systems in Africa—and in the world—Botswana registered the Okavango Delta as a wetland of international importance under the Ramsar Convention, an intergovernmental treaty binding signatories to the conservation and wise use of wetlands. But most of the Okavango River lies in Angola and Namibia, where it enjoys no special protection. Safeguarding a wetland but not its water supply is like protecting an endangered species but not its food source.

Botswana has strong economic as well as political reasons for wanting to keep the delta pristine: Okavango tourism is second only to diamond mining as a foreign-exchange earner. The delta is a golden egg, but Botswana neither feeds nor owns the goose.

A decade ago the three governments formed a commission to oversee the management of the Okavango basin, but how the pursuit of disparate national interests will play out is anybody's guess. Some observers have suggested that Botswana could compensate Angola and Namibia for limiting, or even abandoning, projects such as hydro schemes that would have a negative impact on the delta. However, such a level of cooperation would be rare in global politics.

When David Livingstone asked the Bayei people to explain the phenomenon of the Okavango flood, they told him that every year a chief who lived to the north—Mazzekiva by name—killed a man and threw his body into the river, after which the water would flow. Livingstone never investigated the claim, but a century and a half after he posed his question to the Bayei, I stood on a bullet-pocked concrete bridge in the Angolan highlands and watched boys fishing in the headwaters of the Rio Cubango, one of the two main tributaries that feed the Okavango River. I wondered how many bodies—sacrifices not to water but to battle—had been thrown into this river during Angola's 27-year civil war, which had only recently ended.

I was near the town of Sambo, in the verdant grazing country of the Bié Plateau. It was November, and the summer rains were starting. The landowner, Celestino Jolomba, pointed to two military vehicles rusting under a eucalyptus tree. They had belonged to Jonas Savimbi, he said. Savimbi had been the head of UNITA, the antigovernment faction in the bloodshed.

Driving here, I had passed gangs of workmen daubing white and red paint on stones along the roadside to warn of land mines. Millions of mines remain in Angola, reaping their bitter harvest of limbs and lives. In this place of death it was strange to think that the water flowing beneath me was bringing life to a distant delta. But it was: In a few weeks the flood would start to rise in the Panhandle. Relief would come to the Okavango's parched plains. The miracle would begin again. □

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