

LENA GODSALL BOTTRIELL

BOTTRIELL 1987
~~Bill Broden (2)~~

King Cheetah



THE STORY
OF
THE QUEST

E.J. BRILL LEIDEN



ears—it was all there, the freedom and scope of a wondrous continent set upon a stage brimming with an infinite variety of wild life. Imagine, if you will, if you've ever loved an animal—indeed if you are one to thrill to the pulsing panorama of nature—witnessing from a high hilltop a vast plain, stretching as far as the eye can see, swimming with game not just in its hundreds or thousands, but tens of thousands: a multitude of elephants, buffaloes and zebras, wildebeest and impalas, kudus, elands... and more. That was Africa less than a century ago. The numbers may have dwindled somewhat but there are parts where they are sufficient to conjure up the magic.

Mr Powell's vivid descriptions of the King Cheetah were equally beguiling. "It was neither leopard nor cheetah", Paul was told, uncannily echoing mysterious tales the little boy had heard of savage brindled cats from Tanzania, Kenya and Uganda that were said to be neither lions nor leopards; or, closer to home, the equally ferocious beast the African in his native Rhodesia knew as the "hyena-leopard". It seemed there was much confusion as to whether the King Cheetah still existed or not; it was also referred to as the *Rhodesian cheetah*, the *Mazoe leopard* too, after a place in the north of the country where, according to reliable sources, it was "well-known to natives" in the early part of the century. It was the size of a leopard or a large cheetah, so Paul was told, its spine horizontally etched in broad black stripes converging on the rump before continuing along the tail for about half its length, thence turning into thick rings on the remainder. Describing the rest of the body as being embossed with heavy, black irregular blotches that most resembled large ink-blots, Mr. Powell's lovingly illustrated vignette of the King Cheetah conjured up in the mind's eye of a small boy pictures of an incomparable animal; and, on seeing a rather antiquated drawing that did little justice to its true beauty, he resolved that the world at large would one day come to know more of this unique King Cheetah. Unknown to Paul only some twelve months before in early 1951, the first King Cheetah skin ever to be recorded, the holotype of *Acinonyx rex*—often rumly referred to as "Major Cooper's skin"—had been destroyed.



Holotype King Cheetah skin, Queen Victoria Memorial Library and Museum. Collected 1926.

Presented in 1926 to the Queen Victoria Memorial Library and Museum at Salisbury by a farmer from the east of the country, the very uniqueness of the skin subsequently attracted the undivided attention of the curator, a leading naturalist of the day, Major A. L. Cooper. He was immediately reminded of the okapi, that distinctive and secretive antelope with broadly striped legs from the forests of the Congo basin which had been first hinted at by Stanley in 1860 and was later discovered at the turn of the century by Sir Harry Johnson—venerable champion and saviour of the pygmies—who through the fortuitous aid of his tiny protégés firmly established the existence of this queer, mule-like relative of the giraffe. Now strictly protected, it would doubtless be extinct, but for Johnson, given that for some fifty years before its discovery and consequent classification as a new mammal, its meat had been enjoyed at the tables of Belgian officials without much apparent concern about what kind of animal it may or may not have been obtained from.

Cooper wondered if this equally unique cat had been the victim of a similarly blasé attitude and for how long; indeed, he found it difficult to accept how any animal, bearing the extraordinary markings of the skin now in his charge, should and could remain unnoted and he set out to air his views in a paper read on 30th June, 1927 and later published in the *South African Journal of Science*. It began, somewhat prophetically as it turns out in the light of present-day evidence pointing to the existence of a so-called "sauropod dinosaur" in the northern swamps of the Congo Republic:—

"That this animal was known of for some time past is borne out by the fact that, twenty years ago, mention used to be made round camp fires by natives of a beast that was neither lion, leopard nor cheetah, and, though considered by a number of people to be as mythical as the huge horned water serpent that is supposed to exist in some equatorial swamp, I believe was referred to as the "Mazoe leopard." It was apparently commoner in those days than it is now..."

Disclosures of a further four pelts (obtained through Africans) all sharing that same remarkable degree of parity in pattern

(remembering of course that like human fingerprints no two patterned animal skins can ever be exactly identical) can be directly attributed to the Major's enthusiasm, with much of the available information on the striped cheetah being officially recorded for the first time by him. "With the kind permission of the other members of the Queen Victoria Memorial Museum", as he himself so quaintly put it, Cooper arranged for the holotype skin to be sent to the Natural History Museum in London for examination by Prof. Pocock, a distinguished systematist, with whom Cooper had been corresponding on the matter at some length. Pocock had already opined that it might belong to an aberrant, or abnormal, leopard. This was a notion with which Cooper found himself at variance. Admittedly (that is, at least as far as one could judge from the skin) the build of the animal appeared less like the slim, svelte form of the cheetah, and more like the solid, more stocky leopard. This opinion is reflected in the Natural History Museum's mounted King Cheetah specimen, a pelt purchased in 1928, which impresses one at first glance as having been modelled on the lines of a leopard rather than a cheetah. But no undue significance should be attached to this: taxidermists are as much artists as any sculptor and thus are equally open to the trends, influences and opinions of the day.

There was, however, one notable distinction setting it apart from the leopard: the unmistakable non-retractile or partially non-retractile claws of the cheetah, due to an absence of sheaths resulting in the blunt claws remaining always exposed and extended.

Writing in the *Journal of the Society for the Preservation of the Fauna of the Empire* in 1927, Pocock finally gave his considered conclusions:

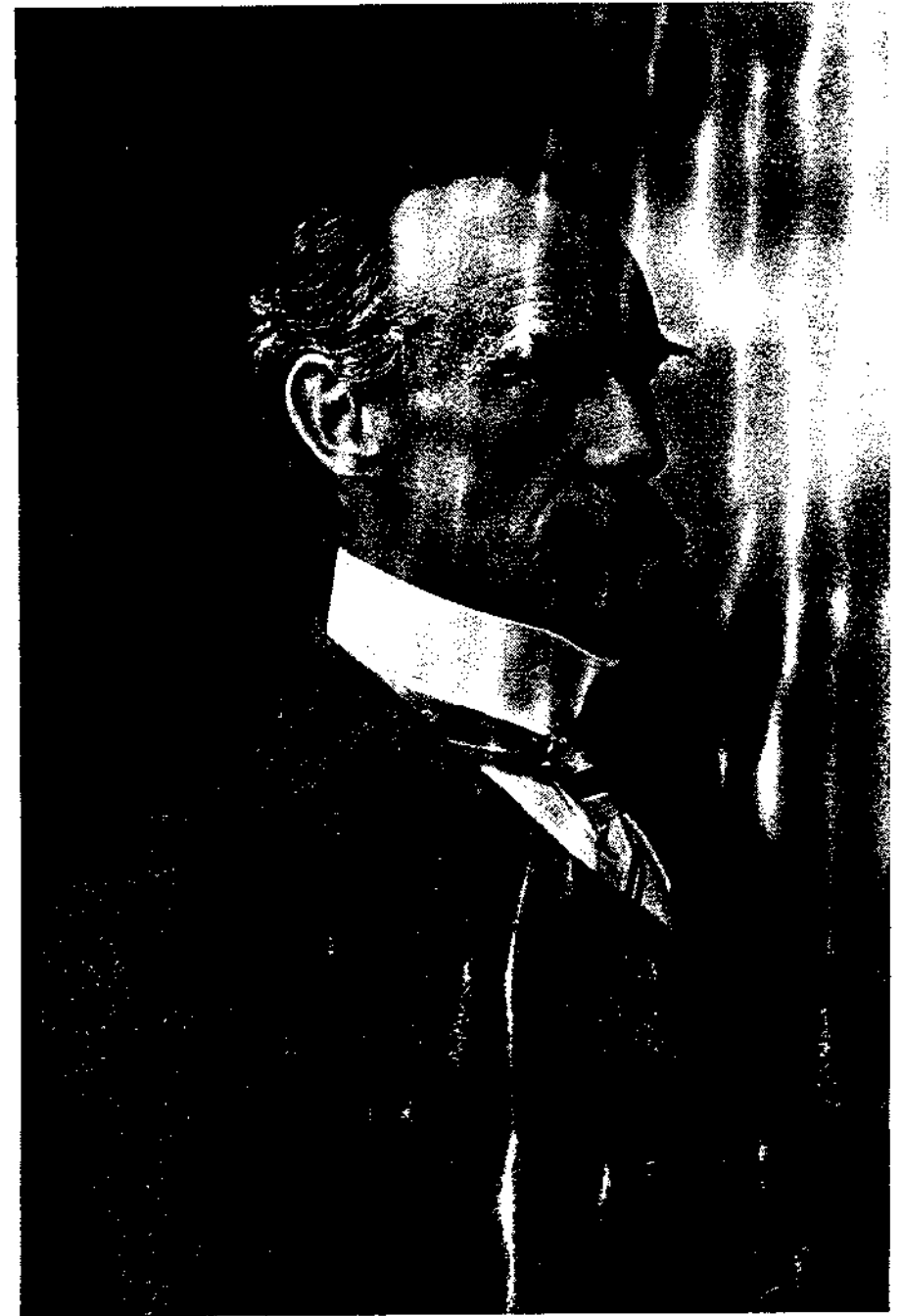
"A glance at it showed me that it possesses all the characters of the common cheetah, except the pattern, which consists of bold black stripes running longitudinally down the back on to the tail and of shorter more transverse stripes, intermixed with blotches and often looped upon the flanks. Major Cooper also made enquiries in Salisbury to ascertain if any other specimens were known. The result was the discovery that the animal is well known to the natives who fearlessly hunt it with assegais and that it has been described as the

Mazoe leopard. He was also able to trace four skins in addition to the one that he sent to England, making a total of five taken at different times and in different places, namely in the Umvukwe Range (*sic*), in the Siki Reserve, at Bikita and at Melsester. With all this evidence available, I did not hesitate to regard the original skin as representing a new species of cheetah which I described...as *Acinonyx rex* in allusion to the splendour of its apparel. But to Major Cooper belongs the credit for the discovery of this magnificent animal which may, I think, without exaggeration, be described as the handsomest member of the cat tribe.”

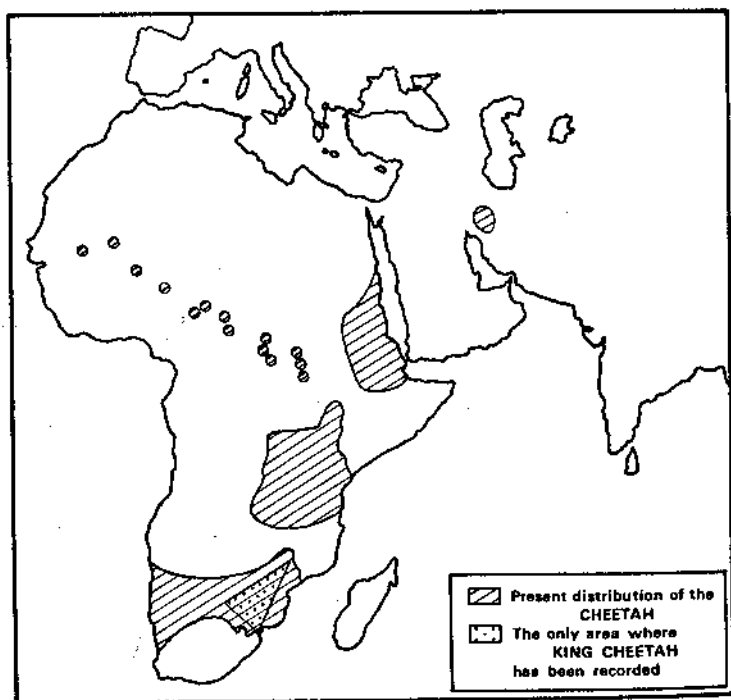
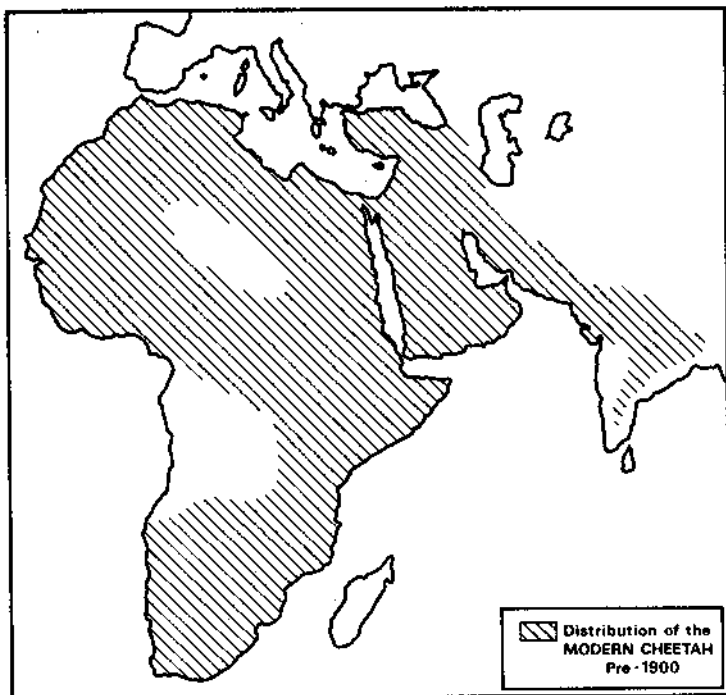
Perhaps Pocock named it as much for its singularity as for its undeniable beauty, for without doubt it is a king amongst its kin. However, his classification was not well received because of a lack of sound scientific evidence. As early as 1932 Angel Cabrera had suggested that it was no more than an aberrant form of cheetah, while two years later Captain Guy Shortridge talked of it as being a localised mutation coming “only from Southern Rhodesia.” There remained Miklos Kretzoi’s classic piece of taxonomic one-upmanship in placing *Acinonyx rex*, Pocock’s taxon, in the completely new genus, *Paracinonyx*. This suggested that it was not a throwback but was more likely a new type of cheetah in the process of developing, a classification and assessment western science appeared blissfully ignorant of. In 1939 Pocock formally revoked his judgement, upon which investigations into the status of the King Cheetah all but ceased.

Today scientific methods of genetic analysis have advanced to such a level that it is now possible to prove or disprove the taxonomic status of an animal; often a small sample of blood may be all that is required. In the case of the King Cheetah it may be assessed through chromosomal and biochemical genetic testing, as well as skin biopsy, on small samples of blood and tissue taken harmlessly from a living body, with comparisons subsequently drawn between the King and the common cheetah.

Further official comment in scientific circles on the King Cheetah did appear from time to time in later years, but it was of slight importance, largely repeating early research on the subject. There were many discrepancies too, with single skins being treated as



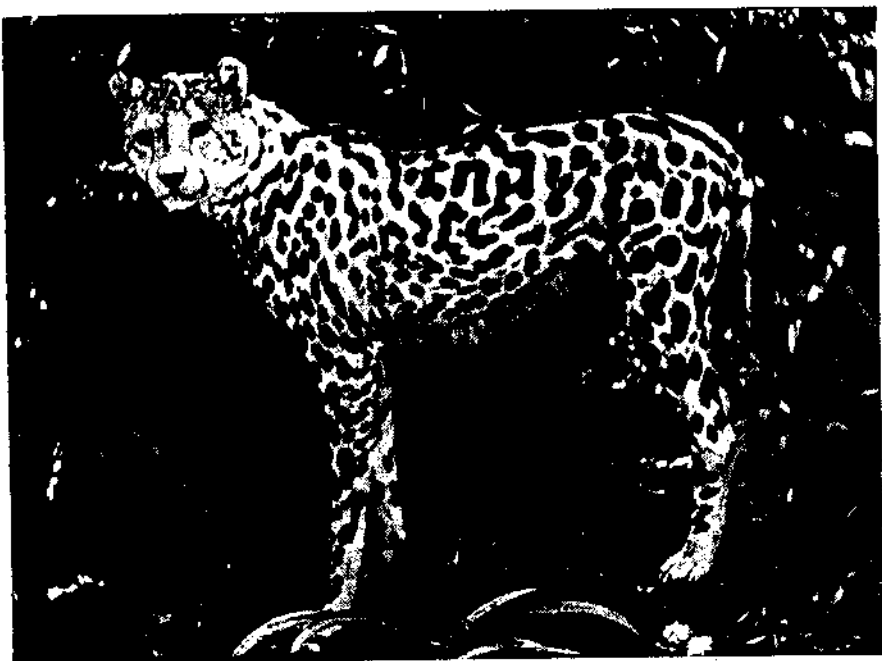
Reginald Innes Pocock (1863-1947). In 1927 he described and classified the King Cheetah as a new species, *Acinonyx rex*. He named it in deference to the regal splendour of its appearance.



of his reasons for this opinion being that, to the best of his knowledge, the local Africans did not have a specific name for it in their native tongue. We'd wondered about this, too, it being generally held that no name for the King Cheetah existed in any African dialect. We couldn't help but speculate on just how such an opinion had been arrived at, given the King Cheetah's history of neglect, its apparently wide range and the remoteness of its haunts.

By an amazing coincidence, a little over a week later, we met up with an acquaintance from Gaborone on our way through Machaneng. A reliably informed person who had travelled extensively round Botswana because of his involvement in the cattle industry, he told us he had just made the most extraordinary discovery regarding local native names for the King Cheetah. Following soon after an earlier discussion we'd had together on the matter, he had decided to embark on a little investigating of his own and as a result had come up with three strong contenders. One was *lethosi*, described by his African informants as being in some way or other a reference to the "different" cheetah. Another was *tladi*, meaning "lightning". Granted, this latter name was a description one could readily ascribe to cheetahs in general, with obvious reference to their speed; but he had also come across a reference to the ordinary cheetah: *lengau*. Perhaps *tladi* was a discrete reference to the bold flashes extending along the King Cheetah's spine for all to see, or even to its lightning temperament ("cheeky", as opined by tribesmen from time to time). These names brought us no closer to the truth, but they added an intriguing dimension to the King Cheetah story nonetheless.

From one of the consular attachés at the British High Commission in Gaborone—otherwise affectionately known as 007 ½—we heard tell of yet more skins that had cropped up in research to date. His was a mysterious tale to say the least; indeed a tale of intrigue. In Palapye, a backwater town west of the Tuli Block, there lived a man who at one time or another was said to have owned no less than four King Cheetah skins three of which had "disappeared" in shadowy circumstances. Where they'd supposedly been



Mounted specimen of a King Cheetah. Cape Town Museum, South Africa.

between some scattered trees, a cat crossed his path near enough for him to take particular note of the bold, distinctive stripes running along its back. Judging it to be heavier than a cheetah, he watched as it hurried off in the direction of a stream.

Be they hunters, game management personnel or naturalists, we'd frequently shown such people photographs of the stuffed King Cheetah specimens housed in the Natural History Museum in London and in the Cape Town Museum. There is a marked difference between the two specimens in the way each has been mounted: the former resembles a leopard with stocky legs, heavy neck and head, no doubt mounted under the influence of the notion popular around 1927 that the King Cheetah might be a hybrid leopard/cheetah; the Cape Town Museum's King Cheetah, on the other hand, was mounted later and bears a greater resemblance to a cheetah because of the way it has been modelled. What was interesting about Joseph's reaction to the photographs was that he was the only person up to that time to spot the dif-

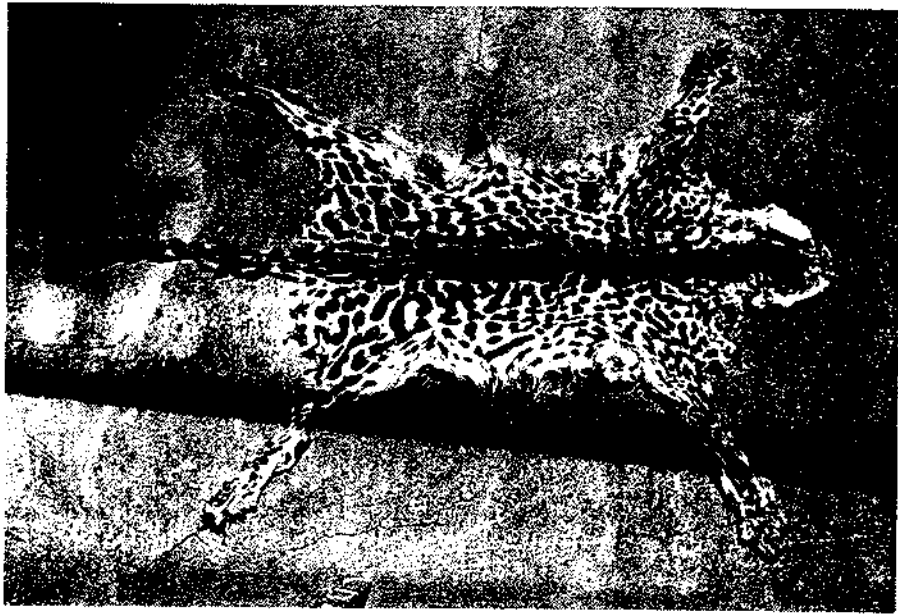
A Once... or Future King

Apart from a remarkable continuity in the standard pattern of three broad dorsal stripes, a preponderance of heavy, irregular blotches far larger than any ordinary cheetah's spots, and a striped and ringed tail in all known King Cheetah specimens, research has otherwise shown that outstanding pattern or colour variation in the ordinary cheetah is rare, with no intermediate coat pattern between it and the King Cheetah evident. Of course, smaller or paler spotting in the ordinary cheetah does occur, environmental conditions demanding it. Spotted cheetahs from Namibia, for example, are very often far paler than ordinary cheetahs from, say, East Africa. A select number of cheetahs known to have been living several years ago in the cold, arid reaches of north-west Iran and strictly protected by the Shah's government, had very long hair. From populations of the two races of cheetah—the African, and the now drastically depleted Asiatic cheetah—a number of subspecies has been described by taxonomists. Six of them have been described from Africa where the only large cheetah populations remain. The differences, however, are not altogether clear. Physically at any rate, they in no way compare with the distinct differences existing between *Acinonyx rex* and *A. jubatus*, in which we are not only talking about a complete change from a flat, monotonous pattern of small coin-spots to a thickly furred pelage laced with inky, fulvous blotches and heavy, broad stripes (not to mention the change of markings always on the tail), but also about different colouring and length of hair. By our reckoning, too, based on a close examination of skins, which may be distorted in the process of preparing them, the King Cheetah appeared to be larger. Apart from an hypothesis that the King Cheetah is a developing melanistic variant, the only reports from fairly authoritative sources of notable coat variations (excluding those of *A. rex*), were unsubstantiated by skins or photographs. There were

two accounts from Africa this century of black (or melanistic) cheetahs; there was a somewhat muddled report of "partial-albinism" in the "woolly cheetah"; and there was a much earlier reference to a Moghul ruler in India, a renowned "naturalist" of his day, Jahangir, being presented with a "white cheetah" at Agra, the first and only one he ever saw, so he tells us. "Its spots" he wrote, "were of blue colour". What is notable about the reference is that the appearance of the animal obviously impressed our royal Moghul commentator enough for him to record its existence for posterity. How noteworthy, then, would a cat as magnificently marked as a King Cheetah have seemed to Jahangir, and other keepers of great kennels of cheetahs in Asia, the Near East and North Africa alike in previous centuries. We can only assume that no-one had ever seen one, given the lack of early pictorial or written references to such a cat.

This dearth of historical records of an animal even remotely like the King Cheetah during the five thousand years man and cheetah have been associated, notably in the hunt as evidenced by ancient drawings, was worth more than just a passing thought. Was it a recently developed, abnormal variant of the cheetah? Had we, like others, for too long been caught in the trap of always looking backwards rather than forwards, bogged down so to speak by notions of throwback, recessive mendelian mutation, and all that? Did the answer lie not so much in the past but in the future? After all, how else would an evolving new strain of cheetah start except as a mutation, as an aberration?

Certainly, the more our research developed, the more and more substantial did the King Cheetah begin to look. The months of research and field-work in Botswana, for instance, though yielding nothing tangible in the way of live King Cheetahs, had added five previously unrecorded ones to the existing list of King Cheetah pelts. For various reasons the other four—the mysterious "Red Shields skin", the one reputedly hanging on a homestead wall, the two auctioned in South Africa—we felt did not justify inclusion in the list. Thus, with the five from Botswana, the pelt collected in the Honde and given to the local Native Commissioner, and another



King Cheetah skin from Zimbabwe, now in the collection of the Kaffrarian Museum King Williams Town, South Africa, showing the ravages of years spent as a floor rug chewed by dogs.

traced from Rhodesia to the Kaffrarian Museum, King William's Town (where it was purchased for a mere £15 after being used as a floor rug chewed by dogs), the list had risen to a respectable nineteen, never previously having exceeded a dozen for decades.

Having taken our leave of Botswana our efforts, far from drying up, continued to produce results. We traced seven more skins, for example, one of which had been "lost" for almost forty years. Three of them, curiously enough, had been listed previously as one skin. We were delighted that each skin unfailingly showed the typical King Cheetah pattern but, at the same time, we regretted the needless slaughter.

At Pietersburg, hub of the northern Transvaal bushveld, we made camp on the outskirts of town. A misnomer really, Pietersburg is not so much a town as a big, rambling village that, like some sophisticated "wild west" watering hole, grew to fit the needs of local farming gentry and travellers alike. A friendly place,

Pietersburg had a community which preferred old habits, like shooting for sport, to "academic" notions of conservation. Only by directing our enquiries towards skin traders, hunters, even poachers, rather than naturalists—if there were any indeed—were we likely to be assured of any success in a search for skins. There was the ivory dealer, for instance, who believed he'd seen King Cheetah pelts for sale on the Zaire/Zambia border near a place called Ndola and again at a lush spot in the Zambezi reaches not far from the Victoria Falls. Although these localities agreed with the type of well-covered terrain we'd come to consider as the King Cheetah's favoured country it is as well to remember that pelts can travel hundreds of miles, with poachers and migrant workers, from where they were actually collected. A private tour of his factory certainly knocked on the head, for us at least, erstwhile assurances of reductions in the wholesale slaughter of elephants across Africa to date, with truckloads of raw tusks arriving from "somewhere up north" and ivory curiosities being churned out even as we gazed. Suddenly tales of heavy elephant poaching still going on even in Rhodesia's Wankie National Park, one of Africa's premier reserves where elephants were reputed to be present in thousands before the war, no longer seemed so improbable.

Instead of concentrating concern on a general campaign to root out large-scale poaching at source the western world has aimed at halting the importation of ivory, spotted skins and the like from Africa. This policy has pushed values of ivory, animal horn and skins sky high; the protests of conservation bodies, by comparison, seem to be little more than hollow, conscience-salving exercises reaching no further than the glossy-magazines and colour television. Indeed, outside of freebooters such as the ivory dealer, there was little that conservation bodies in general knew, let alone could advance on the subject of the King Cheetah. At least, on the unholy question of skins, hunters and taxidermists were far more reliable sources of information. Piet, the professional taxidermist involved in the muddled issue of the Alldays cheetahs hadn't had a single King Cheetah pelt pass through his hands in all his years of experience. And some experience that was! For me, his airy,

squeaky-clean Pietersburg studio was a revelation. The needs of research and education aside, I have never liked stuffed animals, my experience of dusty, expressionless Victorian specimens without aesthetic appeal having seen to that. But this man had made taxidermy come alive, so to speak. From tiny elephant shrews to Cape buffalo Piet had captured the spirit of his animals, at least giving dignity back where there was no longer life.

Over lunch at Pietersburg's main hotel, the hunter who'd accompanied us to Piet's studio had a story for us. Lulu, as we came to know him, had been in Mozambique, on his last shoot there just prior to independence. He had been working the dense, secluded bush country hugging the border with Zimbabwe, some 50 kilometres north of a place called Vila de Manica. Interestingly enough this place is adjacent to the Pungwe/Honde area, our projected zone of search in the aborted Rhodesian exercise. It was here he had shot a King Cheetah, not knowing at the time so he said, what it was. Spurious excuse or not, it's a story you hear often enough. He described the incident. He'd been carefully making his way upwind along a dry riverbed, peering through its dappled flanks for game; he had a licence for kudu and buffalo only and the area promised plenty of both. Through a cluster of trees that kept him well hidden from view he caught sight of a large cat—a large, dark cat he couldn't readily identify—lying on top of a rocky ledge sunning itself. He gazed, watching it intently, not moving an inch. Downwind of it, and well hidden behind a guard of trees, he watched a little longer; the big cat seemed completely oblivious of his presence. It was, he assured us, too good an opportunity to miss, licence or no licence. He took aim, eyes narrowing on his target. As he did so, a most uncanny thing happened. In that breathless instant, as he squeezed the trigger, the cat's head turned, as if drawn by some extra-sensory perception and stared straight in his direction. Here Lulu broke off his narrative and gazed intently into each of our faces in turn, as if seeking some precise explanation, some logical answer; but there wasn't one forthcoming from us. This incident shook him, he told us, like nothing else he'd ever known and for a fleeting moment he seemed to lose all sense of

what he was doing. But it was only for a moment. There came the tell-tale thud, as ordained; the fine head fell forward and the lights of those questing eyes went out. This reminded me of a man who had been an amateur hunter all his life until the day he suddenly hung up his guns, never to hunt an animal again for sport. It is an unspoken rule never to rush up to the animal as soon as one's shot has dropped it but to wait until it has stopped kicking, when its muscles have ceased flinching and contracting to a notable degree. For it can be an unnerving sight. This man had just hit a kudu, a male with a fine set of horns, but unfortunately had not placed his shot as neatly as he might have. In its last throes the frantic animal had run on, ending up hopelessly enmeshed in a wire fence. Impulsively rushing up to it, the man saw something he would never forget: tears, welling from the stately antelope's eyes as they soulfully gazed back at him. The fact that the hunter knew perfectly well that animals on the brink of death expell water from their eyes was neither here nor there. For the first time in his life he questioned his need to hunt. In those eyes he met himself. Lulu learned from his companions after the cat had been skinned that he had shot a Rhodesian cheetah, a King Cheetah, a cat certified as royal game. Well meaning and affable though he was, his "youthful impetuosity" excuse was not very convincing. Hardly notable either was the way the pelt had been cured; and the paws had been hacked off. What was notable for us, at least, was the animal's provenance. The close proximity of it to the virgin Pungwe/Honde area added greatly to the notion that King Cheetahs, because of their dark, heavy patterning were better suited to a well-wooded, lush terrain, adapting themselves in time, as it were, to a more secluded environment occasioned by man's ruthless appropriation of the open habitats of old (the root cause of the ordinary cheetah's rapid decline in numbers this century). An adherence to relatively secluded terrain, merging from semi-tropical rain forest, through thorn forest and thorn bush of acacias and euphorbias, to woodland habitats, such as one finds in the wide sweep of country stretching westwards from Mozambique across the Eastern Highlands and south-east of Zimbabwe to Tuli,

would certainly account for so few sightings of King Cheetahs down the years.

An adjunct to this which deserves to be mentioned is, of course, the increased leopard-threat-factor in such an environment, bearing in mind that leopards have been known to kill cheetahs. Dr. U. de V. Pienaar, Warden of Kruger Park, once showed us a particularly fine photograph he had in his possession by way of example. On balance the leopard probably poses no greater threat to the King Cheetah than do predator-competitors to ordinary cheetahs sharing savanna areas in normal conditions where man's encroachment has not dramatically altered the equilibrium. Without doubt the fact that we were known to be studying the King Cheetah, the cheetah with a difference, was exciting more and more attention.

Checking, for instance, the patterning on ordinary cheetahs for the appearance of stripes didn't produce evidence of even a close approach on any (let alone a row of spots joining to form a line) in almost two hundred cats examined. Cheetah sanctuaries, like the one run by urbane author Des Varaday at Loskopdam south of Pietersburg, offered ample opportunity for such study. For someone clearly fascinated by cheetahs in general, it came as no great surprise to us that he might also have harboured the hope of one day "breeding" a King from his stock of ordinary cheetahs. He did have one intriguing snippet of news for us. Once, in Blantyre, the commercial capital of Malawi, he had seen, among all the brouhaha and colour of a native market, an old African wearing what looked to him exactly like a King Cheetah skin! Regrettably, as is so often the way of things, he didn't follow it up, being about some other business at the time. With its rich blend of secluded mountain country and forest vegetation who was to say King Cheetah couldn't be in Malawi?

Of course, as has already been made clear, it doesn't necessarily follow that the locale where an animal skin is marketed is the same as its provenance. Just as predators will wander well beyond a prescribed habitat, nothing in nature being so cut and dried as to prevent it, so too in the skin trade a pelt may travel some con-

siderable distance—poaching being commonly the reason—before it's eventually marketed. In our research, for example, some places where King Cheetah skins had been bought and sold just could not be considered synonymous with their provenance. The dry Makgadikgadi, that wonder of salt pans and desert scrub in the northern Kalahari, and Freeman's set of four pelts, of which three mysteriously "disappeared", illustrates this perfectly. Intelligent assessment in research is paramount if one is to make any sense of it, especially in an exercise of the kind we were engaged in with its many variables. In this respect extant skins with an authenticated history and those without one presented special problems. A rumour, for example, of three skins in a curio shop in Pretoria that surfaced within hours of our departure for Tuli provided, when confirmed, a tantalising footnote to tales of vanished skins and those others, like the "Red Shields" pelt, we'd been unable to verify or trace. Apparently, since their collection, they had been sealed between layers of naphthalene in the same flat boxes at Ivy's Curios; and so there was no question about their high quality; they were in an exceptionally fine condition. Their origins, however, were questionable. During our months of absence in Tuli some preliminary investigations had been undertaken on our behalf. Rex Sevenoaks, actor, bon viveur and contact-man in Johannesburg, had made the initial approaches and, with wildlife artist Paul Bosman, had managed to get a sight of the skins. Ivy, the director of the firm seemed to be mildly secretive about their existence as much as about their origins. Apart from permitting Bosman to measure and sketch the pelts, he did not give much away about them. Although little could be ascertained through valid inquiry some information was available visually. Each pelt was as big as it was beautiful, the colours rich and vibrant, the pelage lush and silky with little stretching evident. With two males and one female the three averaged out at 7ft 2ins (2.16m) from nose to tail-tip, the largest just topping 7ft 8ins. By any estimate these had been big cheetahs. These pelts justified what many of the facts were indicating: the King Cheetah was king in more than just name. The best information we could establish about the provenance of

the skins was that all three came from "somewhere" in eastern Botswana, arriving at the shop separately in, roughly, "1960, 1965 and 1966". It was, in truth, an inquiry that occasioned much evasion. But it was not so with another skin.

For many years the whereabouts of a certain King Cheetah skin— noted for being the only one to date to come from South Africa— appeared unknown to sources of official King Cheetah research, Smithers among them. For this reason it became known as the "lost Messina skin". The story goes that in 1940 a King Cheetah was shot on a farm called Kongo in the vicinity of Messina, a town in the extreme north of the northern Transvaal, situated some 100 kilometres east of Tuli and just 15 kilometres from the border with Zimbabwe. The region impresses one as being ideal King Cheetah country, with woodland vegetation giving way to more heavy, lush cover the further east and north into Mozambique and Zimbabwe one goes, or west to Tuli. In the course of conversation Ivy, our host and owner of the special set of skins we had come to view, unwittingly supplied a surprise ending to the story of the "lost Messina skin".

In 1940, while still a callow apprentice learning the unedifying ins and outs of the family curio business, he had accompanied his father on a visit to a farm in the Transvaal. The farmer had just shot a large predator that had been worrying his livestock for some time but had been unable to identify it exactly. Ivy's father had no such difficulty: he recognised the unique pattern of the rare King Cheetah immediately. Offering to undertake the work personally, he advised that the skin be professionally cured with just the head mounted, appropriately, in the classic rampant style, snarling. The pelt in question was the "Messina King" of Kongo Farm.

In 1940, taxidermists had not yet begun to use fibreglass skulls for mounting purposes in place of the real thing and this, for us, raised one intriguing, very important question: had the original skull been used to mount the head of the "Messina King", or had the skull of an ordinary cheetah been used?

Ivy didn't deliberate long. His father had "definitely used the original skull" he told us; it was standard policy. If the skeleton

From the Shadows

"I have never had such a magnificent sight of wildlife as that presented by ... *Acinonyx rex*. I consider the male a more handsome animal than 'the Leopard, tiger or Lion...'"

John Buckmaster to Major A. L. Cooper, 14 July 1928

The discovery of a King Cheetah skull in the mounted head of a pelt, itself inexplicably "lost" to research for the best part of forty years, underlined to what extent the unexpected provides piquancy to the spice of quest. A subtle change of direction in conversation, with the aim of drawing Ivy out on the question of the provenances of his three King Cheetah skins, had paid dividends in several ways. The quality of the resultant X-rays, however, was mixed, due mostly to there being not one set but two. In addition to those taken by Paul and I on the portable unit, we had arranged through the good offices of Witwatersrand University for a separate set to be taken on a termograph, as back-up, at Johannesburg's Cancer Research Unit.

Initially, we hadn't been entirely happy with the products of our own efforts. Though readable, they lacked overall crispness, the outline of the skull being slightly fuzzed in parts. The X-ray intensity of the termograph, on the other hand, was such that with even the taxidermist's trademark tacks and pins standing out like Lowry figures, the white china clay, or kaolin as it is otherwise known, which had been packed and moulded round the skull to shape and fill out the mounted head instead of the more commonly used plaster of Paris had, after forty years, been transformed into a chunk of gleaming white porcelain which under the X-ray reflected as brightly as a polished mirror! Naturally this irreparably distorted the image. Fortunately the portable's X-ray photos were more satisfactory. Assisted by the Wits Dental Faculty we had plaster moulds made of the upper and lower jaws.

Subsequent examination of these along with the X-rays at the



The author X-raying in the field the mounted head of the Messina skin containing the first authentic King Cheetah skull to be traced.

Mammal Research Institute, with results confirmed by Smithers, revealed no significant cranial variation between the Messina skull and the cheetah in general. This suggested aberration, a simple pattern variant of the pelage. Yet, as has often been noted in leopards, aberrations are generally little more than "one-off" deviations from the norm. Certainly they are not as dramatically different in either frequency of occurrence or markings in the leopard as they are in the King Cheetah. If the King Cheetah is considered to be no more than an aberration it would have to be called a "standard" aberration, in deference to the striking unifor-

mity between all King Cheetah specimens available for examination. Interestingly enough, the cheetah's skull is subject to variation. Very recent research has confirmed that cheetahs have a remarkably high level of morphological variation, or "fluctuating asymmetry", in their skulls (O'Brien et al., 1986). In other words in the general shape of a cheetah skull, features normally equal in size, such as the bones of the left and right side, can vary noticeably in any given individual.

It was at the Institute that a colleague of Smithers suggested we set in motion a reward scheme—a couple of thousand "bucks" to the person who led us to a live King Cheetah! Well, this was a notion calculated to raise passions. Certainly it had its dark side. Uppermost in our minds was the tragic disappearance of "Phuma", the last of the Timbavati white lions to live out its days in the wild. No sooner had these unique cats made headline news around the world than a bounty was put on their heads as offers running to five figures for the skin of one began to flood into southern Africa. Consequently, two of them, "Temba" and "Tombi", were transferred into the "protective custody" of Pretoria Zoo. It was already too late for "Phuma".

Approximately six weeks after she disappeared, Paul and I had one of those cheerless experiences you recall in flawless clarity long after the event. In our continuing search not only for live cheetahs but also for skins that might show the beginnings of a stripe or a blotch in their pattern, we found ourselves, one wet afternoon, nosing round the musty basement of a nefarious skin trader's establishment. The place was dim, lit only by paraffin lamps dotted haphazardly here and there. At one end a man in a brimmed hat pulled low about his ears talked in hushed tones to the trader as a bevy of Africans silently packed armloads of skins; the still, stale atmosphere reeked of naphthalene. We picked our way around the store, elephant tusks glinting in the half-light. From out of the gloom a face suddenly loomed up in front of us and a voice blurted out breathlessly, "do you want to buy a white lion skin?"

A furtive, stocky individual with fleshy, sweaty features otherwise unnotable, we stared back at him, our mouths agape. Our expres-

sions must have said it all, for within seconds he'd spirited himself away, leaving us standing blindly peering after him into the gloom like helpless, impotent fools. There was nothing we, nor anyone, could do. No official law protected animals as unique and beautiful as the white lions, although they had captured the imagination of the world for years. This well illustrated the dangers of a reward scheme. Soon, however, time would prevent us giving it another moment's thought, so much were events about to run away with us.

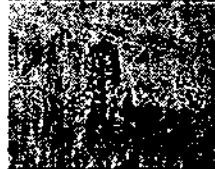
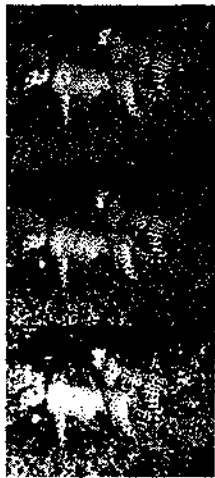
The official lack of attention paid to the King Cheetah sighting in Kruger Park, close to the Mozambique border in 1974 (not more recently, as at first suggested) still perplexed us, because it had been photographed—the first photograph of a live King Cheetah ever to be made known! The general consensus among Park management was that it may have strayed off through the Lebombos, out of Kruger, into Mozambique at some stage before the fence between the two countries had been completed later in the same year, 1974. In its opinion this barricade, built along a National boundary line suffering from guerilla activity, more than likely prevented the cat returning. Alternatively, it was argued, the cat may have perished, an assumption based on the average life expectancy of cheetahs in the wild. Another factor that probably had an inhibiting effect on its attitude to the sighting was its unanimous opinion that the King Cheetah was only an interesting aberration.

One day, not long after our minor scientific scoop with the skull, a colour feature article was published in a popular magazine and we got in touch for the first time with the tourist responsible for photographing the King Cheetah in Kruger Park. We learnt something we could scarcely believe. Not only did he have photographs, he had film, a couple of hundred feet of it, which the authorities of Kruger Park had tended to ignore. During the mildly mannered month of June, Ossie Schoof, a businessman from East London, had taken his family north on their annual pilgrimage to Kruger National Park. As far as his teenage son Gary was concerned they could go on doing so forever. With a tireless record of visits behind

them, the Schoofs had an enthusiasm to match and, consequently, they probably knew their animals and Kruger Park better than most tourists. On the morning of the sighting, while the remainder of the family slept, Ossie Schoof and his son Gary slipped out of their Rest camp in the south-central district around 6.30 and headed east. A short while later, further south on an untarred tourist road about 6 kilometres from the Mozambique border, Ossie brought the car to a sudden halt; a movement less than 100 metres off into the veld had caught his attention. Peering through the binoculars he was pleased to discover a small party of cheetahs in amongst the long, grass, frolicking unconcernedly. Downwind of the cats, which appeared to be on a progressively steady tack towards them, Schoof carefully positioned the cine camera on the window sill of the car and began to film while Gary prepared to take some still photos when the moment was right. As the cats, three in all, reached the road they lingered a moment at the edge before nonchalantly strolling across it directly in front of them. Father and son both knew they had captured something very special on film.

Ossie Schoof's good quality footage revealed a King Cheetah in prime condition, a magnificent young male apparently between ten and fifteen months old. Seeing the film for the first time, we were struck by the way the distinctive black and cream markings of the King Cheetah stood out alongside the sandy, spotted coats of the two ordinary cheetahs accompanying it, in this case its mother and sister. The mother was exceptionally handsome and strong-looking and noticeably larger than usual. We couldn't help thinking she could have taken on a leopard! She sharply rebuffed the young—though not so small—King Cheetah's sexual overtures during the filmed sequence.

Naturally enough, the film greatly excited Paul and I, and Schoof kindly placed it at our disposal. In retrospect, it seems hard to believe that it could have remained virtually unknown for so long. When Schoof and his son rushed back to camp with news of their remarkable sighting the officials they reported it to were plainly scornful. Schoof was indignant. He was a regular visitor to the



Clips from the first recorded film footage of a King Cheetah in the wild. "Like a leopard walking with a cheetah" is a not unrealistic eye-witness description when one looks at the strip of footage showing a King Cheetah with a spotted cheetah, filmed in Kruger Park. The rear view illustrates the striped and ringed tail of the King Cheetah — a consistent feature unique to these animals.

Park and felt he knew his animals. A straight, no-nonsense individual, he hardly struck one as a romancer. It took him almost six months to convince them of its significance. Not so with us. Suffice to say that the sight of a living, breathing King Cheetah strolling across the screen in technicolour worked wonders for the enthusiasm of those people we showed it to. As a direct consequence of this film we once again began to think about how to get a search started in Kruger Park.

At that time the Schoof sighting was five years old, which was a drawback, but one aspect of it made a follow-up irresistible. It had occurred within 7 kilometres of the Mozambique border, in other words the Lebombo Mountains, thereby cross-referencing those reports from the last century of "woolly" cheetahs said to wander among the gorges and rocky ravines of the Lebombos, a 300-kilometre range extending almost the entire length of Kruger Park. Now, of course, it was the prevailing situation that had to be considered. According to the most recent reports from Park officials, there had been no word of any King Cheetah appearing in the reserve since the Schoof sighting. But recent historical events made us sceptical. It is not widely known, for instance, that white lions appeared in Kruger Park for decades before Timbavati and Chris McBride apparently first introduced them to the world. In truth, little heed was ever paid to reports coming even from Park rangers. Anyone who has seen a white lion in the bush will tell you it stands out like an ice-cream.

But the idea of a search in Kruger had its opponents. We were told in quarters whence we initially least expected discouragement that we would be bogged down by bureaucratic wranglings and red tape before we knew what had hit us. Whether or not it emanated from zoo, museum, university or government conservation department the cry was the same, "They won't co-operate with us; how can you ever expect them to co-operate with you, two unimportant foreigners on a private mission?". Fortunately we were not part of the establishment milieu, a fact we had often discovered was to our advantage. Just how much advantage time alone would tell. From Crocodile River the Lebombos run north along the Mozam-

bique border towards Zimbabwe's Gonarezhou reserve, the only place it was once claimed where King Cheetahs had ever occurred. The range is well endowed with forest and bush which blend to form a quilt of vegetation that, at the imposing Lebombo Gorge, fans out across Mozambique to the Indian Ocean and northwards and eastwards in the direction of Zimbabwe and Tuli respectively. The Lebombos were typically representative of the sort of environment we believed King Cheetahs favoured, linked by virtue of their "vegetation type" with areas of southern Africa where the cats had been sighted and skins had been obtained. In the north-eastern Transvaal westward of the Park lies Vendlan, one of South Africa's Homelands. It is mountainous country reminiscent of Lebombo, though rising in many places to as much as 2000 metres above sea level. In some of the highest and least accessible parts, where the terrain is rough and the vegetation thick forest and thorn bush, the Venda bury their chiefs whose spirits, so legend has it, live on in the crocodile, while cheetahs reputedly guard their graves.

We first heard the legend from a German naturalist who had visited Vendlan from time to time to catch full grown crocodiles for his breeding station, the ultimate aim of which was the reintroduction of offspring to the wild state. It was while chasing up rumours of a white crocodile, said to live among the waterways in the foothills of the mountains, that he had first heard about the legend. The crocodile was considered sacred; and it was taboo for a stranger to question such a belief. But the German was a sharp, irascible sort of chap and couldn't restrain himself from chiding them on at least one point—the very idea of cheetahs living in such an environment! Surely they meant leopards? No, that was not what they meant. Cheetahs had been guarding the graves of Venda chiefs for generations, they assured him, a little put out by their guest's derisive manner. Having been guilty of what almost amounted to a heresy, the German wisely left it at that.

By a remarkable coincidence, within days of learning about the legend, we received news from a Game scout who told us how he had seen a King Cheetah skin wrapped around—what he assumed

to be—a chief in the main town of Sibasa in Vendlan when he lived there as a teenager. Shades of Des Varaday and Malawi?! We certainly had no reason to doubt the validity of his observation. The scout's assumption that the African man wearing the skin was a chief was reasonable; any skin of unusual quality or character is invariably coveted by the headman of a tribe for one simple reason—class, his and the skin's!

According to an anthropologist we spoke to (a most charming woman who after many years living with the Venda was ordained an honorary witchdoctor) their insistence that the cats were cheetahs was intriguing. She herself had heard Venda speak of "the cheetahs in the hills" and always with the profoundest conviction. Knowing them as she did she said there was no reason to doubt their word: if the Venda said cheetah lived in the hills, "then cheetah lived in the hills!" was her final judgement on the matter. Observations of this nature should not simply be put down to that "tendency to embroider" syndrome some a e went to attach to the African. Legends among native peoples do not evolve over many generations merely out of some cheerful willingness to please or excite the occasional visitor. So we were obviously anxious to visit Vendlan. But there was a snag.

Vendlan was coming up for independence at the year's end. It was not, we were assured, an ideal time to apply for entry permits. Nor was it prudent. As the lead up to any homeland's independence always proved, it was an edgy period for Pretoria and, as a result, all forms of travel into Venda had been severely restricted, especially foreign travel which would apply to us. Even with a few influential words in high places the indications were that we might be lucky to get clearance in a little under, say, six months. Six months. Fortunately, unlike governments, legends keep.

The Hair and the Unicorn

Apart from indicating a strong correlation with the ordinary cheetah perhaps the most lasting contribution of the skull analysis to our research was that it wetted our appetites for more conclusive and more challenging evidence. For a long time Paul and I had wondered what hair analysis might reveal. With each King Cheetah pelt we handled we were impressed by the soft richness of the pelage. Unlike the coarser quality of an ordinary cheetah's coat, which is generally reminiscent of a short-haired dog's, these were significantly silky-soft to the touch, reminding us somewhat of that sumptuous feeling so characteristic of the well-bred, well-fed domestic cat in peak condition.

We were musing on this one day with Smithers at the Mammal Research Institute, over the head of the Messina King Cheetah whose worn and thinning pelage was a notable exception to the rule. Hair analysis, he reminded us, was a relatively new area of scientific research with institutions in only about four countries in the world having achieved a meaningful degree of success with it to date. There was little helpful information he himself could otherwise offer on the subject outside of suggesting we all ask around about it. Two days later the Director of the Institute favoured us with a priceless snippet of information. By a lucky chance he knew of a woman at the Institute of Medical Research in Johannesburg who at that very moment was working for a doctorate in hair analysis which, in his estimation, could make her unique in southern Africa, if not in Africa as a whole.

Having already started on a study of Africa's Felidae family, the prospect of analysing King Cheetah hair and adding the results to her paper more than delighted Hilary Keogh. A petite, pretty woman displaying no trace of the research scientist's "musty lab" image, she foresaw no problems in using hair from cured pelts provided they were in top-class condition. Hair samples taken from

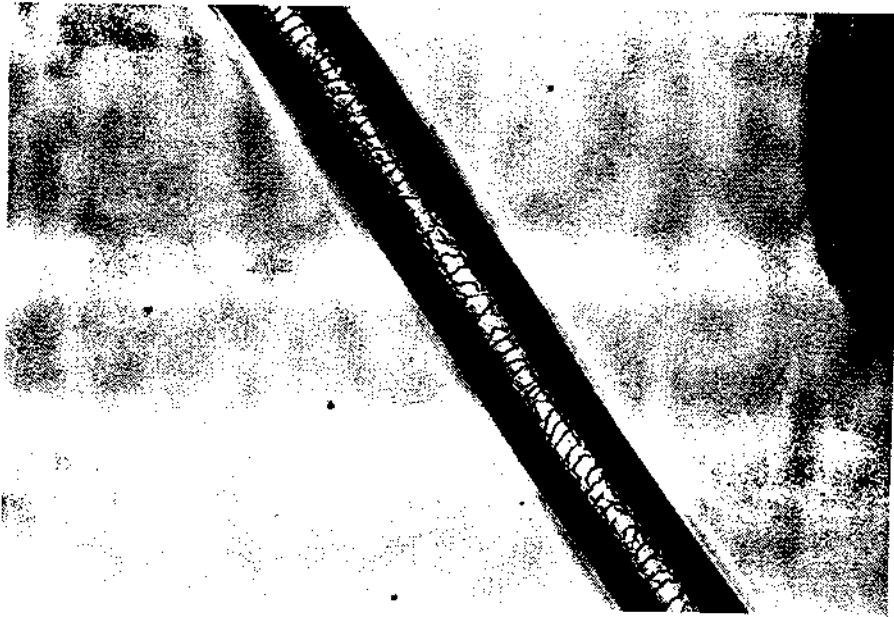
the neck, the dorsal region directly behind the shoulders, and the mid-belly, would, we were told, give her a plentiful supply to work on. The scale pattern on a hair is notoriously variable with wear, hence the importance of the skins being of top quality.

Thus, armed to the teeth with an array of tiny, seal-proof glass bottles, we collected the required samples from four separate skins. The hairs had to measure between 20 and 60 millimetres and had to include both guard hair and underfur. The microstructure of each hair had to be examined in cross-section and along the hair shaft, where scales form a pattern of identification reminiscent of a fingerprint. It was this pattern—known as the cuticular scale pattern—that represented the key part of the analysis. From here the results, photographed under the microscope, would be compared with both leopard and ordinary cheetah hair. No less than ten clear samples were required before a test could provide acceptable evidence. Hilary produced more than half that amount again in the King Cheetah analysis. She already had the relevant test results for leopard and ordinary cheetah but that didn't include any known aberrant forms, which we felt could make for some intriguing comparisons. Subsequently, samples of ginger leopard hair were obtained with, for good measure, a number plundered from a black leopard—no easy task I can assure you. Thus, if only out of sheer curiosity, we felt reasonably excited about the prospects, though it's fair to say none of us expected anything revolutionary to result.

With the experiment reckoned to take a good three weeks to a month to complete, it was merely a matter of sitting back meanwhile and calmly awaiting the outcome. Sitting back calmly was hardly how it turned out. We hadn't counted on the unexpected, which came in the shape of news from Namibia which quite bowled us over. In response to a radio account of the expedition broadcast the previous week in Namibia (South-West Africa), a farmer in the north of the country was claiming to have shot and killed, in that same week, a King Cheetah. At a loss at first to know what he had shot, the account broadcast a few days later on the Afrikaans network, conveniently describing the King Cheetah and the expedi-



Microphotograph of sample ordinary cheetah *Acinonyx jubatus* hair showing "mosaic" cuticular scale pattern



Microphotograph of sample King Cheetah *Acinonyx rex* hair showing "petal" cuticular scale pattern — corresponding, not to common cheetah, but leopard

tion's efforts to date, supplied the answer he'd been looking for. We have never regarded Namibia as likely King Cheetah country. It has the wrong vegetation type for a start; it is too desolate and too dry. And from the time of the earliest references to the King Cheetah, no sightings or skins have ever been recorded from here. A King Cheetah in Namibia defied all reason.

Was it then a "king-sized" cheetah the man had shot? Or a serval perhaps? We seemed to have travelled this path before. Despite these reservations, the farmer's claim demanded special attention. Firstly, the man was adamant it was not a "king-sized" cheetah he had shot; nor was it a serval (the tierboskat, or "tiger cat" as the Afrikaner calls it). Indeed, he went so far as to insist that it was a "young King Cheetah", one not fully grown which raised doubts about his having confused it with a serval. Still he was adamant: it was a King Cheetah, "with the stripes down its back". No less than half a dozen times did we question and verify everything he had to say during long-distance trunk calls to Grootfontein, which is really no more than a collection of cattle properties in the far north-east of Namibia.

But that was not all. He still had the skin. In the week since he'd shot it, there had only been time enough to have it cured locally. This prompted Paul to ask him if there were any bloodclots remaining on the pelt. The farmer deliberated for what seemed ages, then he came straight back with confirmation that there were some as the pelt had only been roughly salted and left to dry in the sun. Moreover, he'd also kept the skull of the cat, so puzzled had he been over its identity. After all, as he said himself, he had "never seen anything quite like it before!". Within the week we were in Windhoek, teutonic-toned capital of Namibia.

About 350 kilometres north of Windhoek lies Grootfontein, close to Etosha National Park and its salt pan, "place of mirages" and one of the great parade grounds for flamingos which occur here in their tens of thousands. Opened to the public as late as 1958 this National Park occupies only a quarter of the area originally planned for it (which was about twice the size of Switzerland). The German colonists set Ethosha aside as a game "preserve" way

question, one realised that he had not been moved for long. As it would have been churlish of us to have started lecturing our host on the immorality, the inefficiency—call it what you like—of shooting every four-legged beast that moves simply for the sake of it, we urged him to be a little more discriminating. If, as we pointed out, he went on haphazardly pot-shooting animals, whether they were a threat to his livelihood or not, especially servals and the smaller carnivores—among them caracals, wild cats, civets and genets—he could and would give himself a real head-ache because of the resulting increase in vermin. He would be removing the one sure control, given freely to him by nature, that the farmer has over the rodent population. Indeed it is this, the simple, raw economics of life—rather than the tragically undervalued argument that in a world of humans and animals, each is necessary for the continued well-being and wholeness of the other—that the farmer of Africa, like the tribal African, appreciates.

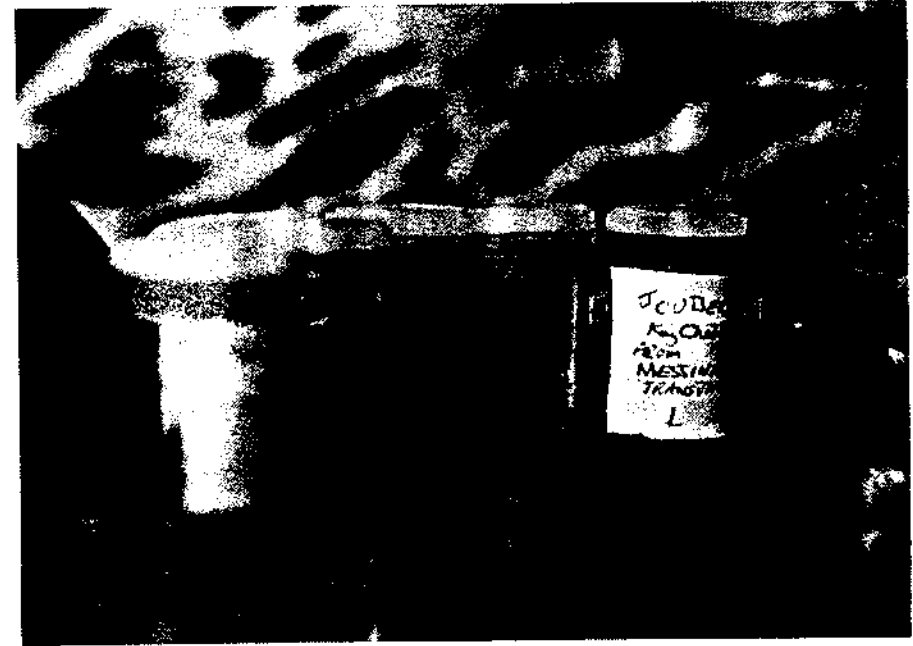
Despite our disappointment, taking our leave of Namibia was painful. Our stay with the Van Zyls in their haunting, sunburnt country was like one long feast for body and soul; a plentiful supply of sunshine, wine and spirited, friendly people, topped up with sumptuous cooking, in a sumptuous amber-soaked environment was just the aperitif we had needed.

When we saw Hilary Keogh again on our return to South Africa she had some astonishing news for us. Her analysis of the hair samples Paul and I had collected had shown a fundamental distinction between King Cheetah and ordinary cheetah. With cuticular scaling on a hairshaft, it is invariably towards the base of an individual hair—where it receives most of its protein and where, as a result, the scale pattern is at its most distinctive—that irregularities will show. In the microstructure of the hair samples Hilary had studied her examination revealed that in the cuticular scale pattern on the guard hair of *Acinonyx jubatus*, that is to say the ordinary cheetah, the pattern was clearly mosaic, meaning that the scales or lines run across the hairshaft in a haphazard fashion, just like a mosaic. Now, on the King Cheetah guard hair—remembering that the

animal we are talking about is still a cheetah, or at least a cheetah "type"—the scaling was unmistakably petal, especially towards the base, which is to say that the lines or scales lay across the hair-shaft in a regular and more orderly pattern of leaves or "petals". This petal pattern is a feature of leopard guard hair!

This revelation certainly sent a few interested parties reeling, ourselves not the least among them. One inevitable result of all this was that the argument for the King Cheetah being a hybrid immediately reasserted itself. This argument had originally found favour in some quarters purely on the basis of the size of King Cheetah skins which indicated a bigger cat than the ordinary cheetah, its legs thicker set and comparable to those of the leopard. We had never held with the hybrid theory which, in the King's case, was a supposed cheetah/leopard combination. Apart from appreciating that a leopard will kill an ordinary cheetah given the opportunity (the other way around is inconceivable), the King Cheetah—size, markings, length of fur, mane, etc. aside—retains features too obviously resembling those of the ordinary spotted cheetah, namely the partially non-retractile claws, the characteristic facial "tear marks" running from the eye to the upper lip, and the similar skull and teeth structure (as indicated by the Messina X-rays). In short, it has a general cheetah-like appearance.

What most concerned us, however, was the question of how a cat like the King Cheetah could pass on an attribute of another cat belonging to a completely different species and genus. The additional premise that the King Cheetah was, for instance, an aberration, only complicated the issue. Subsequently it was suggested that the King Cheetah may equally have resulted from a cross between a cheetah and a leopard as from a single mutation. The crossing hypothesis could be explained in this way: a young male leopard encounters a fully grown female cheetah in oestrus, that is to say on heat. They mate—if the situation was reversed a female leopard would tear a cheetah's throat out instead—then go their separate ways. If there are any offspring, those more cheetah-like in character will naturally be better able to keep up with a cheetah



Specimens of King Cheetah hair.

mother, more able to live and hunt as a cheetah and thus would be better equipped for survival.

At the same time, might it not also be possible that way back in the remote past cheetah and leopard were one and the same? Possible, but hardly probable. It is believed that the cheetah evolved quite independently from the other big cats, namely the *Panthera* group (lion, leopard, tiger etc.), which are distinguished from the cheetah by the presence of a hyoid bone in the throat which permits them to roar. Biochemical evidence, however, suggests that the bigger cats are all very closely related, with individual origins (when some sort of adaptive differentiation took place between them) probably dating no further back than the early- to mid-Pliocene era, roughly between four and twelve million years ago. Recent studies have demonstrated that cheetahs display notably low levels of genetic variation due, it is believed, to population bottlenecks resulting in inbreeding. Possibly these bottlenecks have been caused in recent times by intensive poaching and in the

ancient past by severe ecological upheavals, such as occurred in the late-Pleistocene era when many big, specialised carnivores became extinct. Such a paucity of genetic variation makes the dramatic presence of the King Cheetah all the more intriguing. On another level, it certainly confirms why variants of the modern cheetah—in striking contrast to all the other cats—have always been so rare. At yet another level, there may be a connection between the leopard attribute in the hair of the King Cheetah, as demonstrated by the hair analysis, and atavism (a tendency to reproduce ancestral rather than parental characters, the result being what is popularly known as a throwback). It is said that many felines have derived their spotted markings from a “primitive” striped coat, the stripes having gradually broken up into a lighter, more diffused pattern of spotting as the animals moved out of jungle and other heavily forested environments with the spread of more open grassland areas. It is conceivable, then, that the King Cheetah pattern of today, as a recessive form, is a throwback to a forest-dwelling ancestor. This could make it the original pattern of the first cheetah to have evolved (a similar explanation has been proposed for the reticulated giraffe). This pattern later gave way, for adaptive reasons, to the spotted coat of the ordinary cheetah. But if this is the case, then surely cheetahs like the King should have appeared sporadically among the previously large populations of cheetah which inhabited parts of East and North Africa and Asia during the thousands of years man and cheetah have associated?

If, on the other hand, the King Cheetah has only arisen recently as the result of a local mutation, the frequency and consistency of the King Cheetah pattern in known specimens this century may be accounted for by the gradual emergence of a new race of cheetah. Unfortunately, severe reductions in wildlife habitat and the indiscriminate slaughter of cheetahs could have interrupted the process to an extent we will never be able to judge. There was no tidy scientific answer to the results of the hair analysis. Perhaps only controlled research using living animals would solve the riddle. A vet on behalf of a certain zoo even mooted the offer of

a plot of land being made available for breeding purposes if and when we located King Cheetahs alive in the wild. Whatever the outcome of that, we began to seriously consider that even without live King Cheetahs, selective breeding using common spotted cheetah from those areas where King Cheetah have been recorded, could, in the end, be the answer. After all, this is how man has developed special breeds of cattle, dogs, horses and sheep.

Kruger Park, while carrying out an independent survey for his department, he had seen a King Cheetah but had declined, so he says, to report it to official sources either at the Park or his department on the grounds that he had no intention of divulging its whereabouts. This gave us a golden opportunity, which we acted upon swiftly.

Within forty-eight hours, at National Parks HQ in Pretoria, the Chairman and his Director, clearly irritated by what had transpired on their television screens two nights previously, were cordially inviting Paul and I to carry out a study of our own in Kruger Park—the search the cynics reckoned would never be allowed—without any of the basic restrictions that applied to tourists. Our chat-show colleague had done us a favour beyond our, and I daresay his, wildest imaginings.

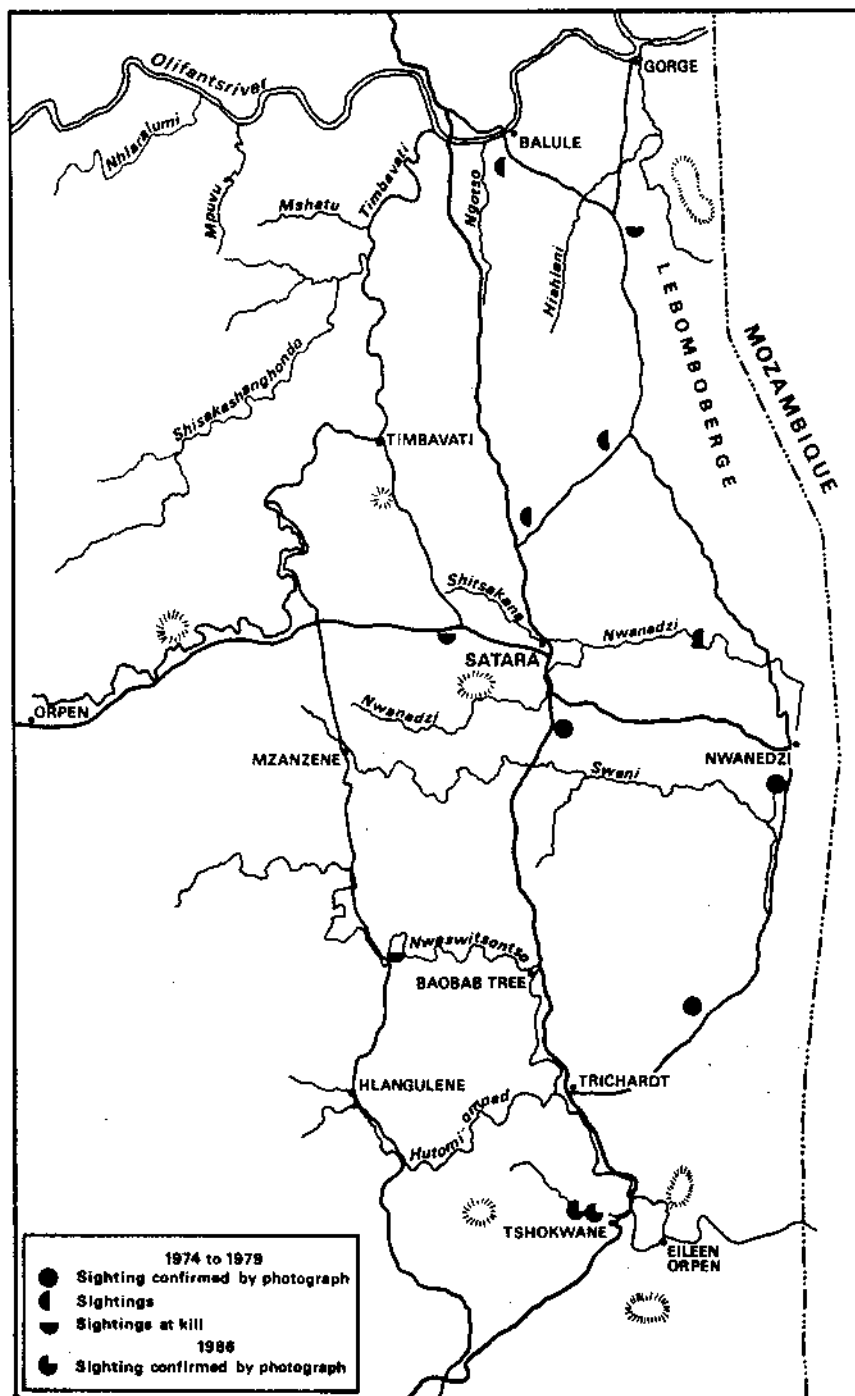
By lifting restrictions we were automatically given as much freedom as any park official; all that was expected of us was that we should not abuse the rights and privileges accorded us. Spoilt as we had been by the freedom of the wild open bush where no official rules as such exist to govern one's movements, it was still an opportunity not to be underestimated. During the early days of our research, long before embarking for Africa with the expedition, we had come across a vivid reference to the Messina King Cheetah in a set of old *African Wild Life* magazines Paul had carried around with him from country to country, along with other sacrosanct memorabilia. It was in one of the 1962 issues that there appeared a short commentary from a member of the Transvaal Museum in which he said that, without doubt, the King Cheetah was also an inhabitant of the northern Transvaal, citing as evidence not only the Kongo farm specimen, but also claims of King Cheetahs having been seen from time to time in Kruger Park.

To bring matters right up to date, the Schoof sighting, as was becoming more obvious all the time, was only one of a number in Kruger Park to be backed up by photographic evidence. The second report, received through a press contact of a Pretoria man, revealed portrait shots of exceptional quality of the very same King

Cheetah some three years later! Learning to recognise from photographs individual animals belonging to a patterned race is relatively easy because no two striped, blotched or spotted animals from the same species have identical patterns. Each ocelot, giraffe or King Cheetah is unique; a zebra foal will even recognise its mother by her stripes. Thus, in its way, the markings of an individual patterned animal constitute its "fingerprint", its personal ID if you like.

We made plans to concentrate what turned out to be a preliminary search in the South Central District where both sightings had occurred. The second sighting had also occurred in the winter, near Satara rest camp, roughly 30 kilometres as the crow flies from the area where the Schoofs had filmed and photographed the same King Cheetah nearly three years previously. Incredibly, through a potential sponsor, we were to uncover yet another sighting of the same King Cheetah. This time it had been observed and photographed at a later date, reputedly in early 1978, close to a place called Nwanedzi which nestles far into the foothills of the Lebombos. The site forms the apex of a triangle linking the previous two photographed sightings, defining an area either kept to or returned to by the cat in question on at least three occasions in four years. Little credence was given to the vet's claim. Perhaps he had seen a King Cheetah, perhaps not. We had no means of telling. Finally, with fuel and food sponsorship organised, we were on our way; naturally, "accommodation" in the Park, for want of a better word, would be free. The only luxury donations we allowed ourselves were the loan of a 16 mm cine camera and the gift of a crate of the best wine for those blissful nights to come under Southern Cross skies.

Though the name itself may not conjure up romantic images, our stay in the "Zebra Pen" will forever remain one of my happiest memories of Africa. For sheer novelty it came close to eclipsing the camp at Tuli, although with all due respect to Kruger Park, camping out in the reserve could never compare with that Eden on the Limpopo. There Paul and I could wander naked if we chose and never be bothered by convention. Living in the untamed bush at



Section of the Kruger National Park showing sightings of King Cheetahs.

Ex Africa Semper

However it may be measured in degrees of success or failure, the balloon exercise was a triumph in media hype and co-operation. Looked at coldly, it was simply another milestone in an extraordinary expedition that had assured the King Cheetah a place in the public consciousness, had increased the current field knowledge of the animal, and had re-opened the question of its status. Now, with the winding up of the balloon search to conclude the most comprehensive fieldwork on the King Cheetah ever undertaken, the emphasis shifted.

A programme of selective breeding using common cheetahs from those areas of southern Africa demonstrated by our research to be King Cheetah habitats, offered every possibility of producing King Cheetahs under captive conditions. One of the tragic realities of modern Africa is the way its virgin habitats are being eroded. Much of her wildlife is now confined within artificial boundaries. But, even though reserves and game parks can only be samples of the old ecosystem where nature was free to operate unhindered by man-made strictures, they have become cornerstones of present-day wildlife conservation. Despite our urgings, however, nowhere was there in operation a specialised programme for selective breeding of the King Cheetah. Accidents, nonetheless, will happen.

Someone once wrote that Africa is the natural home of coincidence. On the 12th and 14th May 1981, little more than a year after the completion of our fieldwork, the first King Cheetahs to be bred in captivity, one male and one female, were born. Each was conceived of spotted cheetahs at the De Wildt Cheetah Breeding Station and Research Centre in South Africa, and was sired by the same male wild-caught as a cub in the Messina district of the northern Transvaal—the very area our research had pinpointed as part of the habitat range of the King Cheetah! The two



The King Cheetah pattern is standard across all specimens available for examination. The outstanding difference in markings between spotted cheetahs and King Cheetahs is strikingly demonstrated in this study of adolescent animals at the De Wildt Cheetah Breeding Station, South Africa.

mothers were sisters bred from parents, also wild-caught, which had come from the northern Transvaal and Namibia. They were not born within any planned programme; they were born, as it were, "by accident". The De Wildt Station had been vehemently opposed to investing time or money in what it considered a side issue to its main campaign: the study and breeding of cheetahs in general, to which all their resources were fully committed. Thus the births couldn't have come at a more fortuitous moment than if they had been planned by providence.

In the case of such a zoological oddity as the King Cheetah, fame can be a kind of safety net. The publicity that had surrounded our research and fieldwork had generated for the King Cheetah a notoriety that had permanently stripped it of its previous anonymity; it had almost become famous. It is ironic, therefore, that the pregnant mother of the female King Cheetah cub-to-be was sold off before she gave birth. Apparently her considerable climbing abilities, which had earned for her the nickname "Jumper", had posed a threat to the efficiency of breeding procedures at the Station. The cub, subsequently christened "Queenie", was born in a small, commercially orientated game park in Natal. Within a few weeks there was a five-figure price tag on her head. Some time later, it seems, "Queenie" was "transferred" back to the De Wildt Cheetah Breeding Station, a celebrity in her own right.

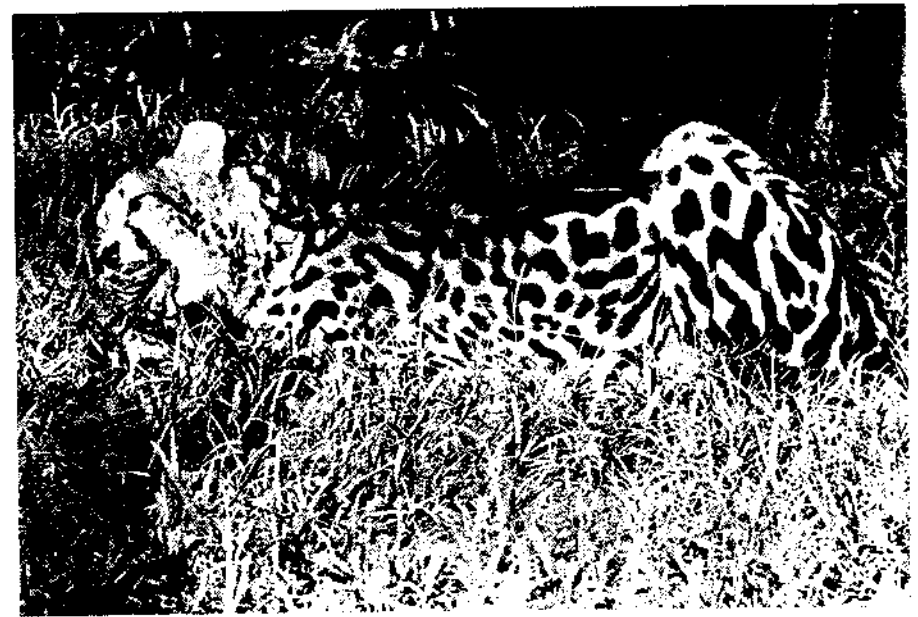
The births within two days of each other were to be the first of several. At the time of writing, eleven more King Cheetahs have since been born at the De Wildt Station from offspring of the same cheetah line; the latest was born in 1987. Only half of the original stock of thirteen cubs survive, demonstrating something of the high mortality rate of cheetahs in captivity as much as the strength of the genes producing the King Cheetah. And there have been other problems, some with hindsight predictable, others not.

De Wildt nestles on a shadowy South African outcrop overlooking the controversial homeland of Bophuthatswana. In response to the severe reductions in the cheetah population across Africa this century, it was established as part of a comprehensive programme for

the propagation of captive cheetah. Starting with an original stock of cheetahs wild-caught in the northern Transvaal and Namibia, and with the help of an occasional enlightened farmer keen on capturing rather than shooting cheetahs, the skill of its breeding programme has enjoyed phenomenal success. Already adult offspring have been translocated to the semi-wild state. Thus, given the low levels of fertility and genetic variation that research studies have recorded in cheetahs, the unique success story of De Wildt would seem to be both good news for the cheetah and for captive breeding in general. But, admirable as that success may be, the captive breeding of cheetahs brings with it unique problems which, for many people, questions the very point of it.

Captive-bred cheetahs, more than any other cats, are particularly difficult to translocate successfully to the wild state simply because the specialised hunting skills best taught to cheetah cubs by their mother in natural, wild conditions, are virtually impossible to simulate successfully in captivity. This was why cheetahs used as hunting companions in the past were captured as adults for large royal stables when their hunting skills had been fully learned and tried, a custom that, unfortunately, resulted in the inevitable decline in numbers of cheetah breeding stock in the wild. After all, the specialised methods that the cheetah employs to chase, strangle and dissect its prey is unique to it; and its physique and internal organs are specially adapted to perform the kind of hunting skills that give this high-speed runner a better success rate of kills in the open savanna than any of its major competitors. Sadly, while cheetahs are being bred so successfully in captive breeding sanctuaries such as De Wildt, the fact remains that the few still left today in the wild in South Africa continue to be shot as persistently as ever, a tragic contradiction.

As guests of keeper Ann van Dyk who, while managing the centre for Pretoria Zoo, has been to a large degree responsible with vet David Meltzer for De Wildt's success, we spent an amiable and informative few days observing and, in a minor way, participating in the various methods employed in its breeding and research programme. The centre has good natural drainage with a fair cover



In this study of a King Cheetah, one can see how the cat's heavy markings would clearly be disadvantageous in open savanna, yet ideal camouflage in woodland and thornbush habitat.

of trees and bushy scrub, and is largely made up of spacious enclosures which fit in with the surrounding environment with respect to size, lay-out, and natural ambience. Its philosophy has been to keep the animals as wild as possible and to restrict human activity. In the breeding season at De Wildt males and females are isolated, except for mating purposes, with groups of males being released daily near the female enclosures to gauge and observe the onset of sexual receptivity. Hereafter, oestrous females are allowed to mate as much as desired for two to three days with a specified male. As for the maternity pens, strategically placed slits or "windows" in the boma-like high, brush fencing permit the observer to see inside without being seen; the aim is to avoid undue stress being placed on a nursing cheetah. The animals undergo regular veterinary checks, including blood counts and the like. Records are kept of each individual. In the case of a wild-caught cheetah, this includes a reference to its origin. This appeared to be

mostly in the northern Transvaal, a fact which was to prove pertinent with respect to the King Cheetah.

One particular study just being embarked upon at the time of our visit involved looking at the reproductive traits of male cheetahs in established populations. Cheetahs display a strikingly low level of fertility, particularly in captivity, due mostly, it had previously been thought, to stress induced by captive conditions. The study involved examination of semen collected by the electro-ejaculation method. With the animals having been first anaesthetized, then weighed, the ejaculation of individual males was stimulated with a small electro-charged rectal probe shaped like a phallus and inserted into the cheetah's rectum. This stimulated seminal flow and the ejaculate was then collected in a warmed vial. When the study was complete, some three years later, it was to confirm that the ejaculate quality in the male cheetah is poor; the cause, it has been held, is of either genetic consequence, a unique species norm, or possibly both. Sperm counts were shown to be as much as ten times lower than in other related species like the domestic cat, with a staggering 70 percent of the sperm deformed in physical character. Such findings in a mammal species are generally linked to pronounced infertility. For the first time they offered a logical explanation for the difficulties that have been encountered in the breeding of cheetahs since time immemorial. Together with the strikingly low levels of genetic variation that have been demonstrated to exist in southern African and east African cheetahs, it poses some intriguing questions. Where, for instance, does the King Cheetah fit in all this?

The modern species of cheetah is the most specialised of the big cats. The only species in its genus, *Acinonyx*, it has also shown remarkable uniformity in both type and markings throughout its formerly wide distribution over much of India, across Africa from the Cape to Cairo and all suitable regions between in south-west Asia. Smaller or paler spotting as is well known, or subtle variations in coat base colour, do occur in response to the demands of environment. But notable pattern variations are uncommon enough in the cheetah to be considered rare. Indeed, the

appearance of spontaneous mutations in cheetahs during the five thousand years man has associated with them—in what is probably the most unique relationship ever known between man and beast—have been so rare, they are virtually non-existent. As the cheetah's Hindi name "spotted one" suggests, nothing remotely like the King Cheetah has ever been recorded. There exist no intermediate coat patterns to speak of between it and the spotted cheetah. No feline species in Africa or Asia, in fact, has been known to produce, at intervals, a consistently uniform and singularly distinctive pattern variant displaying such a marked divergence from the norm, a variant which is also consistent in its occurrence over a wide but well defined geographic area. The uniformity of the King Cheetah's coat pattern, similar in thirty-eight specimens recorded so far south of the Zambezi in a portion of southern Africa where the common spotted cheetah has been nearly exterminated, is unparalleled among big cats. This makes more significant the recent research which indicates that all cheetahs are virtually genetic twins, for they have levels of genetic variation which are among the lowest in any known mammal species.

Genetic uniformity in any species hampers its ability to adapt to severe ecological upheavals and changes by reducing the natural buoyancy of variation within the species. The animal will not cope well with new viruses. Competing successfully for survival becomes more difficult. Such is the cheetah's genetic uniformity that even skin grafts transplanted from one cheetah to another in one study, were readily accepted without subsequent rejection. With its reproductive abilities no less affected, with low sperm counts and deformed sperm as demonstrated in the De Wildt study, it is hardly surprising that the conception rate of the cheetah, both in the wild and in captivity, should be low. On the other hand cub mortality is high; in the wild it is as much as 70 percent and in captivity it is higher than in most other large mammals. The breeding of cheetahs has always been very difficult. Akbar the Great, the sixteenth-century Moghul emperor and father of Jahangir, is renowned in history for having kept cheetahs

and hunting with them. It may not be well known that he went to great lengths to encourage breeding among his cheetahs. Eventually he achieved success: one litter—and it was the only documented cheetah litter to be born in captivity until 1956! It is noteworthy that such significant findings should occur in the one big cat considered to be the least adaptable in times of ecological stress and the least able to produce spontaneous aberrations and mutations. The cheetah has been a hunting companion for man from as early as B.C. 3000, in Sumeria, to recent times—and yet it is the one big cat science has taken the longest to know. Is it not remarkable, therefore, that no written or pictorial record has come down to us of an unusual cat remotely resembling the King Cheetah? The high esteem accorded to these cats by their royal masters in times past has been generously chronicled and colourfully depicted on everything from ancient Egyptian wall-paintings such as on the tomb of Ramses II to rich Renaissance tapestries. Akbar even raised one to the rank of “chief” following an exceptional kill it had made, further ordering that a drum be beaten in front of it in its honour whenever it went out. It is surely logical to assume that a cheetah as singularly different and handsome as the King Cheetah would have excited enough royal attention for it to have been recorded for posterity. After all, such literary observations on the rare and unusual in the wild animal kingdom are well known as those of Jahangir ably demonstrate. Despite this some scientists are still disposed to regard the King Cheetah as little more than a colour variation which occasionally occurs among ordinary cheetahs, supported by the birth of King Cheetahs in captivity from normal spotted cheetahs—a simple pattern aberration in other words, comparable to numerous other aberrations commonly found in leopards in Africa. It must be remarked, however, that on this very question of the incidence of aberrations in the leopard and the cheetah, the two species couldn't be more different. The infinite degree of variability in ground colour and markings present in the leopard, for instance, has led modern taxonomists to describe and name as many as thirty subspecies, as well as innumerable aberrations. It is much the same



Lena and Paul Bottriciell at Loskop Cheetah Sanctuary. Examining spotted cheetahs for the appearance of any blotches or stripes that could be considered an intermediate stage between the common cheetah and King Cheetah was an essential part of research.

with the serval, which displays such diversity in its pattern of barring, spotting and base colouring that the servaline—the small-spotted or speckled servaline in which the spots are so minute it appears to be almost plain coated—was for a long time considered to be a separate species (it actually represents the extreme end of a very wide colour and pattern range, there being intermediates of all stages between the two basic types). The contrast between these and the cheetah and the King Cheetah couldn't be greater. It has been suggested that the King Cheetah represents a similar genetic phenomenon to that which produces the change in the domestic cat from the “wild type” striped or mackerel tabby to the classic blotched tabby. Parallels have also been drawn with white tigers and even white lions. But white lions, for instance, have intermediate stages. Some lions even have white socks! Achilles of the Timbavati pride is a prime example of this. Tigers have white bellies, but sometimes the white extends to most parts of the legs

and half-way up the chest; this is arguably an intermediate stage. Furthermore, both white lions and white tigers are only single, flat-colour deviations appearing in locations relatively small in extent when compared to the King Cheetah's habitat-range. As for the tabby, four distinct forms are recognised as occurring naturally. The tabby also has a universal distribution. The King Cheetah has only ever appeared in a specific geographic area of Africa south of the Zambezi in southern Africa. Moreover, the King Cheetah's pattern has basically five distinct points of difference from the ordinary cheetah: embossed stripes and blotches strikingly raised above the base hair; longer, silkier hair; striped and ringed tail; bold black on cream or ivory colouring, and a longer mane that remain virtually unchanged across thirty-eight specimens. These differences are hardly comparable to a single colour, or more precisely to the single pattern change from just "wild-type" stripes to blotches, such as occurs in the tabby.

These comparisons invite several questions. How can such a marked variation in the King Cheetah come from a single recessive gene, as has been suggested since the first specimens were born in captivity—significantly out of cheetahs from the King Cheetah's suggested geographic area? Just what significance does its continued occurrence have? How is it that with such marked physical differences from the common spotted cheetah it can so regularly appear with such a uniformity of pattern? Why indeed are there no intermediate coat patterns between it and the ordinary cheetah? King Cheetahs are without question the most unexpected, uniquely patterned big cats to be chronicled in modern times. Their appearance is unprecedented. No variation in any felid species can compare with theirs. The markings alone are strikingly dissimilar to anything recorded before or since the first documented skin was collected—dark markings, best suited to thornbush and woodland, approaching a forest environment which is not generally associated with the cheetah. No ordinary cheetah this, no simple deviation from the norm in a single colour change. Genotype aside, the King Cheetah is essentially different and not just in the way a black jaguar differs from the average spotted jaguar, or a ginger leopard

from the average leopard. With these we are simply looking at a basic colour deviation: black in the one instance, with the jaguar's spots still evident; a gingery overlay, a wash of ginger over the cat's markings in the other.

The King Cheetah, on the other hand, is not just different in colouring, striking as that may be. Its fur is longer; it has a slightly bigger mane as a result; it is a "big" cheetah. These are characteristics worthy of note on their own. More important, however, is the regular appearance, only south of the Zambezi in a wide but well defined geographic area in southern Africa, of the standard King Cheetah pattern, a pattern which makes it unique among big cats: a uniform combination of bold black-brown markings, embossed, or raised above, a cream base on a coat characterised by softer, silkier, longer hair; broad, distinctive stripes running down the spine; heavy irregular blotches on flanks and hindquarters; and a striped and ringed tail. This combination of features is consistent in all King Cheetah specimens available for examination (assuming an acceptable degree of deviation between members of the same patterned species or race, such as we see in Grevy's zebra and the Siberian tiger, among others).

The results of the hair analysis add a significant parameter which is difficult to judge accurately. Should that, too, be put down to coincidence, a smudge on the slide perhaps, or a fluke? Does it correlate with supposed evolutionary traits in the cheetah? What of the De Wildt King Cheetah cub's mother, "Jumper", with her leopard-like climbing abilities, so remarkable in an animal celebrated as a sprinter but not as a climber? Is there more to the "hyena-leopard" description of the King Cheetah in the *nsuifisi* legend from Zimbabwe? With its dark markings and heavier build making woodland and forest ideal camouflage for it, how much effect could the increased ultra-violet in those conditions be having on the development of the King Cheetah's patterning? What, too, may be the added effect on that development of the minerals in the soil, consumed via the vegetation by its prey? Too many oddities in nature have been put down to coincidence, leaving the way open for yet another missed opportunity.



The mounted King Cheetah specimen in the Natal Museum, Pietermaritzburg, South Africa labelled 'Coopers Cheetah': one of the first five King Cheetahs collected in Southern Rhodesia. Mounted in 1929 by Rowland Ward, this world famous firm of game measures listed and illustrated the King Cheetah as a separate species as recently as 1980.

Never was there a more lucid illustration in the King Cheetah of evolution happening, or perhaps struggling to happen, before our eyes! Mutations, after all, provide the genetic variations upon which natural selection can act. Is it impossible to watch a species at different stages of its development? Does not a sub-species in the making first logically manifest itself as a mutation? In such a process, environment and geography play significant parts—witness the increased proportion of dark-coloured moths in areas of high pollution in Britain due to predation by birds on the more obvious, lighter moths. The leopard's "rosettes" aptly mimic the light-dappled, shady cover in a chosen tree. The dainty shoulder barring of the serval neatly echoes the spindly, spiked tops of the thatch or tambookie grass with which it regularly associates in the grasslands and watered habitats of Africa it frequents. Camouflage is a com-

mon condition of survival. In a wooded, forested environment so suited to its heavy dark markings, the King Cheetah's stripes and blotches seen from a tree above them would perfectly mimic the network of branches and foliage in shadow around them. Thick barred stripes and large jig-sawed blotches constitute an ideal dual-camouflage, useful in attack and, equally, useful as a defence mechanism against efficient tree-dwelling hunters like the leopard. Such markings are perfectly suited to the heavier wooded cover of the forested environment.

It is argued that King Cheetahs cannot be awarded sub-species status as they do not occupy a separate geographic area. But, as far as the naming and describing of species and races is concerned, the definition of a separate geographic area is as yet not precise. The species of rhino particular to the island of Java is as separated, specifically, from the smaller Sumatran species, as the two islands are by the Sunda Strait. Few natural barriers in Africa can so precisely and so completely delineate and isolate one geographic area from the other. No better is this demonstrated than with the geographic areas ascribed to the seven species and sub-species of zebra. These have all been named and described from a portion of the African continent; and if the mountain zebra of the Cape had not been exterminated throughout most of its former range their ranges would all still widely overlap.

The suggested geographic range for the King Cheetah interconnects between areas of thorn forest and woodland of mostly high elevation in a triangle of country sweeping south through eastern Zimbabwe to Botswana, thence along the Limpopo River to the Lebombo Mountains flanking Kruger Park. These areas are connected as much by direct geographic link as they are by vegetation type, topography, climate, and even soil. The mighty Zambezi River, which once divided the two former Rhodesias, is a formidable northern boundary that since time immemorial has been an impassable barrier for wildlife, preventing migration of cheetahs north or south of it. The Limpopo River in the south provides another natural barrier for most of its course, thus accounting for the fewer reports of King Cheetahs in the wild in South



Balloon search camp-site, Satara, Kruger Park.

Africa. Westward beyond the woodland country of Tuli in north-east Botswana spreads the vast Kalahari where the King Cheetah's markings would naturally be disadvantageous. Lastly, adjacent to the lonely, isolated strip of forest and thornbush running the length of western Mozambique, is the lush chain of hills and mountains in Zimbabwe's secluded border region. As this is the provenance of the most notable number of wild King Cheetah sightings and skins recorded to date it may well represent the nerve centre of the King Cheetah's geographic area, as much as its eastern boundary. Intensive settlement and development and the consequent slaughter of cheetahs elsewhere has created its own barrier.

Never is nature more adaptable than when under threat. Just as today's ecosystem is in retreat, so too is the cheetah retreating. Its old habitat has been severely eroded by urban and agricultural development. Driven away increasingly from the savannas the cheetah must adapt. That it can is evident in Kora in central Kenya where spotted cheetahs have adapted to a thornbush habitat. In the King Cheetah we could be witnessing a develop-

ment more profound, as Miklos Kretzoi judged so presciently more than half a century ago. It appears to be one of those rare opportunities to watch nature in the process of evolving a distinct and absolute pattern change in response to pressing environmental needs; mere colour phases may be succeeded by the possible development of a new race of cheetah which, one day, may attain species status. Having to adapt their way of hunting to a wooded/forested environment, where speed would not be as advantageous as it would in more open habitats, may be detrimental for the species as a whole but favourable for the striped individuals which would be better camouflaged. What may have interfered with the process, to an extent we will never be able to judge accurately, is the wholesale slaughter of cheetahs over the past eighty years in the areas of southern Africa where King Cheetahs have appeared.

Cheetahs continue to be shot in the wild in southern Africa as, ironically, they are being increasingly bred in captivity. Thus, with the difficulties that belabour attempts to introduce captive-bred cheetahs into the wild, cheetah sanctuaries, at worst, are seen by their critics to be breeding little more than "zoo animals; at best, they are recognised as an enormous pool of material for research. It is in this latter respect that the King Cheetah, if it is to serve no other purpose, can play a vibrant part. Given the cheetah's low level of genetic variation, a breeding programme involving King Cheetahs might be one means of increasing genetic variation—heterozygosity as it is called by the scientists—in today's cheetah populations. In this way, perhaps, the cheetah's vulnerability and mortality in infancy may be reduced, giving it a better chance to cope in a time of ecological upheaval. In a litter of cheetahs, recently born at Britain's Whipsnade Zoo of East African and southern African parents, a reduction in the mortality rate was noted. Levels of genetic variation in the East African cheetah are known to be fractionally higher than levels in a captive South African cheetah. For the immediate present, however, the choice lies with those actively involved in the breeding programme at the cheetah station in South Africa which houses the only King

SPECIMEN SKINS OF KING CHEETAH TAKEN TO DATE

Year	Location	Specimen	Collector	Current Owner
1 1926	Macheke Rhodesia	flat skin (holotype)	Mr. D. Fraser	Destroyed circa 1950/151; National Museum & Monuments of Rhodesia
2 1925	Bikita Rhodesia	mounted skin	Mr. H. N. Watters	British Museum (Natural History)
3 1925	Bikita Rhodesia	mounted skin	Mr. H. N. Watters	Natal Museum South Africa
4 1925	Melsetter Rhodesia	flat skin	Mutambara Mission	Unknown
5 1926	Seki Rhodesia	flat skin	Mr. Lacey	Unknown
6 1927	Mt. Selinda Rhodesia	flat skin	Maj. A. L. Cooper	British Museum (Natural History)
7 1928	Bikita Rhodesia	mounted skin	Mr. H. N. Watters	South African Museum, Cape Town
8 1935	Birchenough Bridge Rhodesia	flat skin	Mr. D. Townley	Sir Archibald James
9 1940	Messina S. Africa	skin/skull	Mr. S. van der Walt	Mr. J. Joubert
10 1942	Tjototjo Rhodesia	flat skin	Mr. N. L. Dacomb	Kaffrarian Museum King Williams Town South Africa
11 1956	Inyanga Rhodesia	flat skin	Mr. Waddington	Mr. Meriden
12 1960	Tuli Botswana	flat skin	Mr. L. Van Niekerk	Mr. L. Van Niekerk
13 1960s	Rakops Botswana	flat skin	Mr. C. Freeman	Mr. C. Freeman
14 1960s	Rakops Botswana	flat skin	Mr. C. Freeman	stolen (where- abouts unknown)
15 1960s	Rakops Botswana	flat skin	Mr. C. Freeman	stolen ,,
16 1960s	Rakops Botswana	flat skin	Mr. C. Freeman	stolen ,,
17 1960	Botswana/ Transvaal?	flat skin	Mr. R. B. Ivy	Ivy's Curio Shop South Africa
18 1965	Botswana/ Transvaal?	flat skin	Mr. R. B. Ivy	Ivy's Curio Shop South Africa
19 1966	Botswana/ Transvaal?	flat skin	Mr. R. B. Ivy	Ivy's Curio Shop South Africa
20 1968	Tuli Botswana	flat skin	Red Shields	Unknown
21 1971	Moijabana Botswana	flat skin	Dr. R. H. N. Smithers	National Museum of Botswana
22 1974	Mozambique	flat skin	Mr. L. Von Tonder	Mr. L. Von Tonder

CONFIRMED LIVE KING CHEETAH SPECIMENS

	Year	Location
1	1974-1979	Kruger National Park
2	1981	Seaview Game Park (now at De Wildt)
3)		De Wildt Breeding Centre
4)		De Wildt ,,
5)		De Wildt ,,
6)	1981-1987	De Wildt ,,
7)		De Wildt ,,
8)		De Wildt ,,
9)		De Wildt ,,
10)		De Wildt ,,
11)		De Wildt ,,
12)		De Wildt ,,
13)		De Wildt ,,
14)		De Wildt ,,
15	1986	Kruger National Park
16	1986	Kruger National Park

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