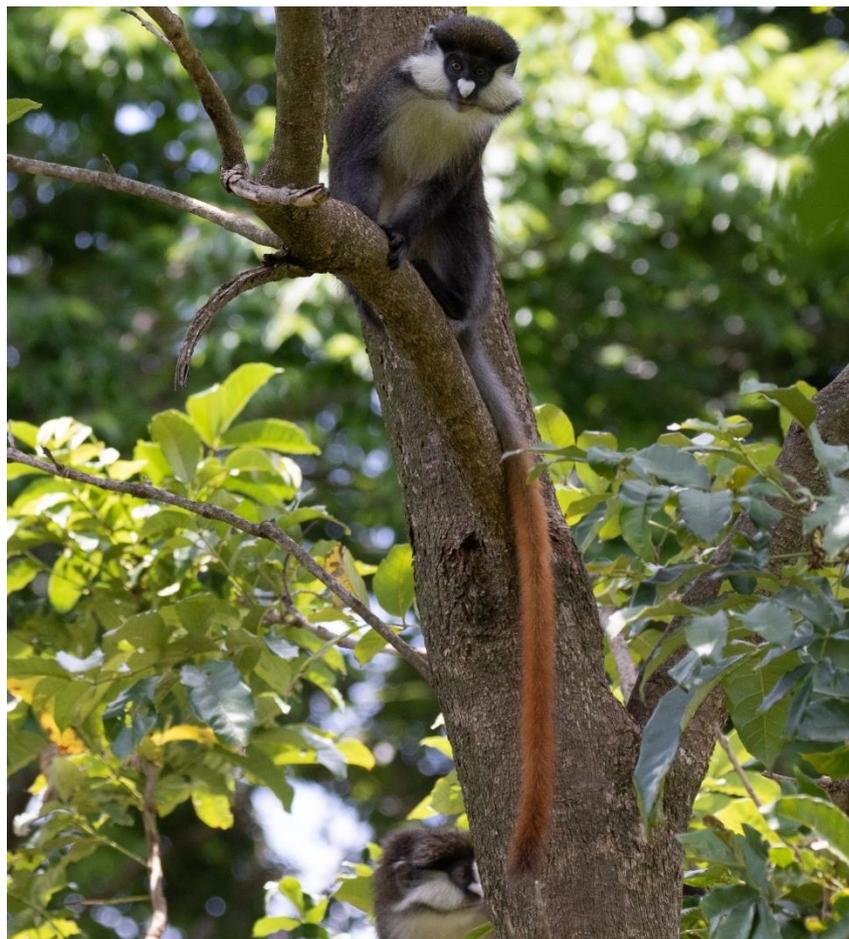


Mammal Big Day – Southern Kenya – October 2021

Zarek Cockar & Stratton Hatfield



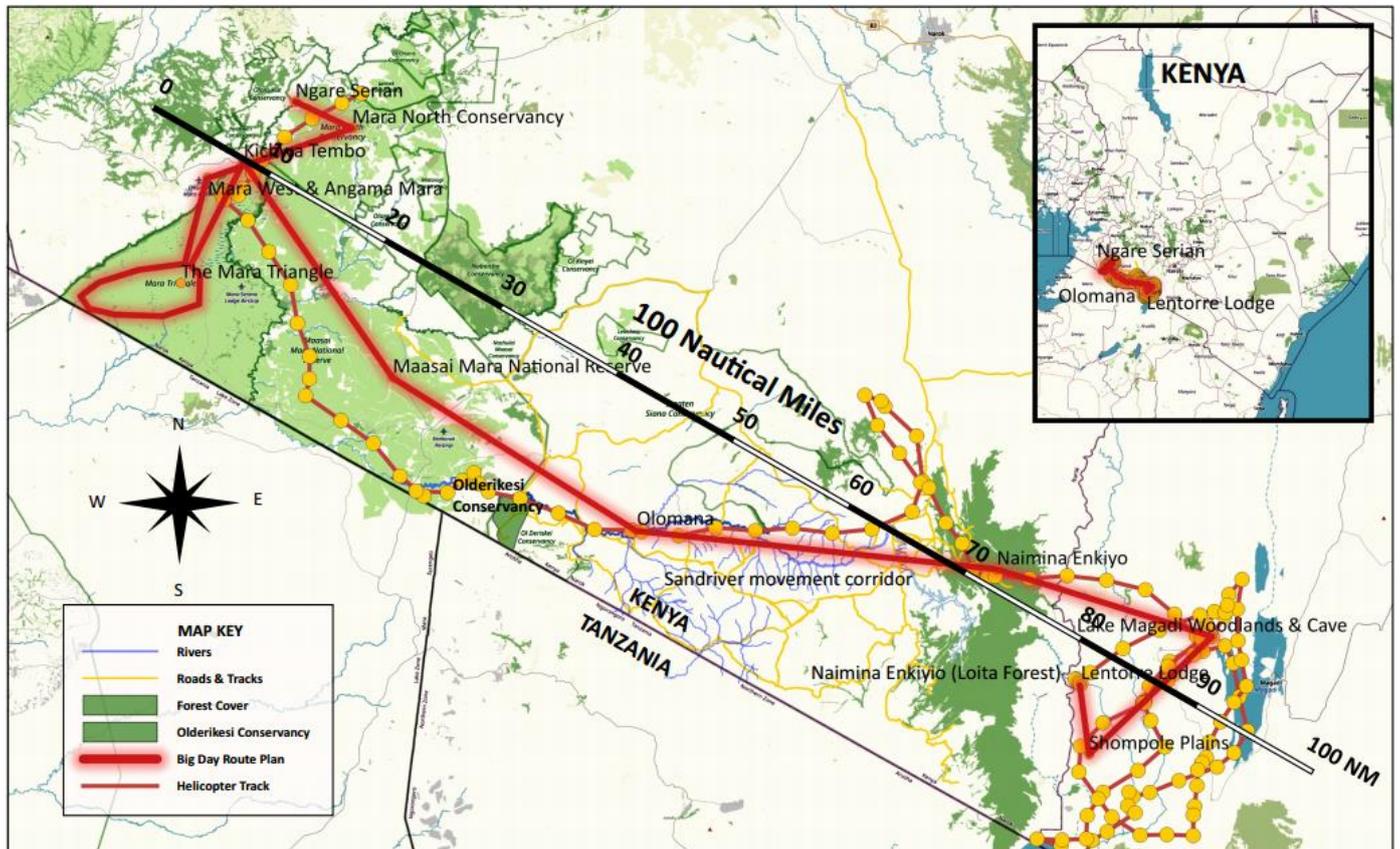
Schmidt's Red-tailed Monkey (*Cercopithecus ascanus schmidti*) in the Kichwa Tembo forest

11:45 pm on the 31st of September 2021. The alarms we set on our phones go off. Stratton Hatfield and I groggily roll out of bed to get dressed and ready for the start of our “Mammal Big Day” which starts when the clock strikes midnight on the 1st of October. The 5, or so, hours of sleep leading up to this moment don't seem nearly long enough! Phones, torch batteries, camera batteries, extra charging packs, and thermal scopes are all unplugged from their chargers, and installed in their various slots, pockets, and devices.

‘What's a Mammal Big Day?’ I hear you ask. It's the mammal equivalent of a Birding Big Day, where birders try to identify as many species in the wild as possible in a 24-hour period – usually from 12:00 am to 11:59 pm on the same date. It's a shorter version of a “Big Year”, a concept that became more widely known after a Hollywood comedy film with the same name was released in 2011, starring Jack Black, Steve Martin, and Owen Wilson. Incidentally, Stratton and I have both birded with the man who set the as-yet-unbroken birding big year record in 2016 – Arjan Dwarshuis. We wouldn't necessarily call ourselves twitchers, and while we're both keen birders, we're both just passionate about all biodiversity, and the opportunity to do a mammal big day became so exciting to us, it was difficult to focus on anything else.

We're not the first people to do a mammal big day, by any means. It's a concept that's catching on in the growing mammal watching community around the world. In our case, with lots of encouragement and support from Pete Silvester of [Royal African Safaris](#) and the [Royal African Foundation](#), the idea of a mammal big day represents an opportunity to showcase to the world the diversity of Southern Kenya. In much of Sub-Saharan Africa, a large portion of funding for conservation comes from tourism, and after COVID 19 effectively brought all tourism to a grinding halt, showing off what's on offer is one step in the right direction! Peter came to us with the idea of covering 100 nautical miles (one nautical mile is equal to one ‘minute’ of latitude – just over 6,000 feet) for our big day, and it was quickly agreed that one of the most precious, and diverse 100NM stretches was across Kenya's Maasai Mara ecosystem, into the [Sand River Corridor](#), across the Nguruman-Loita landscape, and down into the

southern Rift Valley toward Lake Magadi. Our big day would span Afromontane forest, rocky escarpments, high grasslands, rivers, dry scrub, semi-desert, and the dusty shores of a shallow alkaline lake. Perhaps more importantly, it would span vast swathes of community lands on the brink of irreversible land-use change – areas that never make it into the news, but harbour untold biodiversity, and provide incalculable ecosystem services to tens of thousands of Kenyans and Tanzanians for free. Securing this area for a land use that maintains these services and diversity is absolutely critical. Establishing a conservation model that allows for continued ecosystem connectivity between Nyakweri forest, on top of the Siria Escarpment, across the Mara, Sand River Corridor, over the Loitas, and down the Nguruman escarpment is key.



Our route across the 100 NM stretch from the Siria/Ololo Escarpment to Lake Magadi

The world record for species numbers identified on a mammal big day has been held since February 2019 by [Charles and Lara Foley, Brenden Simonson, and Phil Bowen in the greater Tarangire ecosystem in Tanzania](#). At 64 species, their record was always going to be a challenge to get close to, or beat, and although this wasn't our primary goal, getting 65 or more was an exciting prospect. Thus, we decided we'd try to follow some of the basic rules they had:

1. All species recorded would have to be wild and not trapped.
2. We could only rely on ourselves and could not respond to 'intel' provided by others over the phone or radio on the presence of a particular target species.
3. Both of us would have to see and/or hear each species, and agree on its identity before it could be recorded (hence, if I saw a rodent disappear down a hole before Stratton had a view, we couldn't count it)
4. Mammals can be identified later based on a combination of field notes, photos, and sonograms
5. Identification can be done to genus level if only one species from that genus is counted

As technology improves, so do the chances of seeing higher numbers of species. Stratton and I were well equipped with 2x [Lahoux](#) thermal spotting scopes, 1x 100-400mm lens on a Canon 7D Mark2 Camera, 2x binoculars, and a Wildlife Acoustics Echo Meter Touch Pro 2 (bat detector and sonogram recorder), and our smartphones for logging our species and times.

At 11:58 pm, we're standing on the front deck of our beautiful tent at Ngare Serian, a stunning little camp on the western bank of the Mara River. Adrian and Roisin Allen, the General Managers of [Alex Walker's Serian](#), graciously

offered us a place to eat and sleep before the big day, and a vehicle on the day itself, replete with coffee and snacks. Adrian is there on the veranda with us, ready to join us for the first 6 hours.

12:00 am and my thermal scope picks up a rodent moving up a dead stump behind the tent. In my excitement at the first mammal of the day, I swing my red torch out onto the stump only to watch it scamper into a hole to hide. Many mammal species are less disturbed by red light than by pure white or blue-tinged light, but several rodents and bats seem to dislike it even more. Stratton and I can still see the rat, but it's unidentifiable at this point, and unlikely to come out of its hiding spot until we're long gone. Better not to waste precious time – we record it tentatively as "Unknown arboreal rat (*Dendromus* or *Grammomys* sp.)". Our first species of the day, and we don't even have a name for it! We'd love to be able to count this towards our total species list for the day, but we both know we'd be better off ignoring it. So, I turn my gaze upward and find our first REAL species of the day, a sleeping Vervet Monkey in the Elephant Pepper Tree in front of the tent.

From here, we walk through camp, across the suspension bridge over the Mara River, up through Serian, and into the vehicle. It's been half an hour on foot, and we've got 6 species. Once we get in the car, the species count begins to climb a little faster, picking up Plains Zebra, Lion, White-Tailed Mongoose, Silver Galago, and Savanna Hare quickly. The period between midnight and 4 am is generally not the most active time for many mammal species, so the list begins to slow down again after we've spotted most of the plains game resting up. We've been out for several hours now, most of it in perfect Bat-Eared Fox habitat, but we still haven't spotted one. We pick up a dog-like shape in our thermal scopes way out on the horizon, hopeful we've finally found what should be a relatively easy species in this ecosystem. It turns out to be a Black-Backed Jackal, which, although new for our list, was never going to be an issue for us to find.



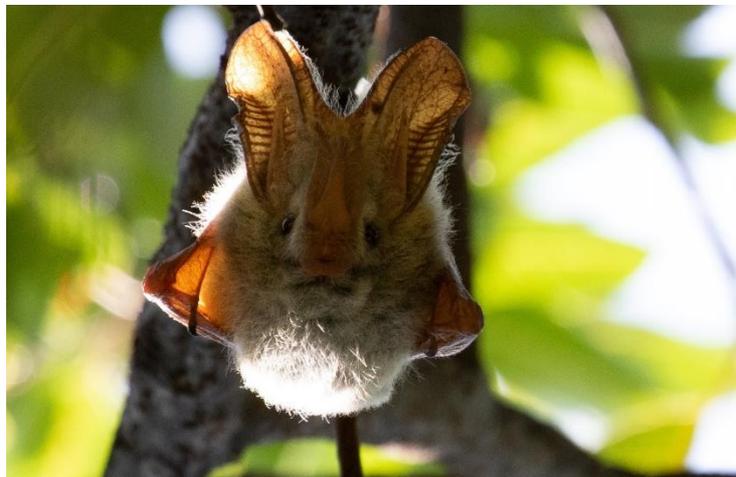
African Savanna Hare (*Lepus victoriae*)

The first 4 hrs of our day were spent driving through [Mara North Conservancy](#), one of the first, and certainly the largest community conservancy in the greater Mara ecosystem. At over 74,000 acres, and with over 800 landowner members, conserving this area has a big impact. All the major mammal species of the Mara ecosystem are known from this area, except Black Rhino, and it has the added advantage of allowing night drives. Mara North is part of a larger group of community conservancies that, together, protect almost as much land as the main Maasai Mara National Reserve. The main difference between the conservancies and the reserve is the direct benefits they provide to the communities that own them. From tourism-based revenue to well-managed livestock grazing access, the [Maasai Mara Wildlife Conservancies](#) continue to fine-tune a revolutionary conservation model that's now spreading across Kenya and other parts of the world. They're not perfect, by any means, but their admirable goals, their ambition for success, and the results they achieve are all plain to see.



East African Gerbil (*Gerbilliscus vicinus*) – recently split from the Fringe-tailed Gerbil (*Gerbilliscus robustus*)

Stratton and I are both amateurs when it comes to bats, but we know our ability to see and record a wide variety of bat species will be key if we're to come close to the record. In camp, we've seen a few bats flying overhead, and we record them on the bat detector. Now we're out on the plains and we're picking up two or three more, including the unmistakable Yellow-winged Bat, a common and very visible resident of Acacia woodlands across East Africa.



A Yellow-winged Bat (*Lavia frons*) which we first recorded in Mara North and then photographed at Lentorre

It's 4am and time to start making our way out of Mara North and up the Siria/Ololo Escarpment towards [Angama Mara](#), where we'll be meeting photographer Adam Bannister and guide Robert Kiprotich, who'll accompany us for the next 6 hours. Out on the main road heading south towards the escarpment, we find a Cheetah mother and her 3 cubs! We'd hoped to find cheetah before dawn to take the pressure off and allow us to go for other species during the day, so this is a stroke of fantastic luck. They're active and on a mission to get to new hunting grounds in time for dawn. A hapless Spotted Hyena gets chased out of the way by the cubs as their mum makes a beeline across the plains.



Cheetah in the thermal scope!

A quick stop at [Mara West](#), and we're out of the car looking for the resident Bush Duiker. It's not making an appearance at 05:00, but we do manage to find 2 new bat species, including an *Epomophorus sp.* Epauletted Fruit Bat (we later find out, from Dr. Paul Webala, that it is *E. wahlbergi*). It's still dark, and we continue to Angama,

hoping for just one or two more nocturnal rodents before the sun comes up. Adam greets us at Angama with promises of a little mouse that he sees every day in his kitchen. His wife, Diana, rubs her eyes and smiles from the bedroom door when Adam barges in the house with us, announcing we're looking for their mouse friend under the stove. She's up and offering us coffee in a minute. What a sport! Alas the mouse was nowhere to be found and we walk out to say goodbye and a massive thanks to Adrian over a cup of coffee before heading down the steep escarpment into the [Mara Triangle](#).

Now that it's daylight, we're keen to find Hartebeest, Serval, Oribi, Bohor & Mountain Reedbuck, Black Rhino, and some mongooses. The hartebeest isn't too hard and Banded Mongoose present themselves beautifully near the road, but all the guides in the Triangle have been struggling to find Black Rhino recently. We hear on the radio one has been seen crossing the road just where we were 10 minutes before, but we're technically not allowed to respond to intel over the radio, and we don't want to back-track, so we keep moving. But now we hear 2 other guides chatting about a Serval close by. Do we respond or keep moving? We agree to go look and decide later whether we can count it or not. And we're glad we did, when we find it sitting at the top of a tall dead stump, scanning its surroundings before clambering down and walking off into the grassland. We'll have to talk this one over and cross our fingers in the hopes it's not the only Serval of the day!



Serval (*Leptailurus serval*) in the Triangle – thankfully not the only one of the day

We stop into the Mara Triangle Headquarters behind Serena Lodge, where Warthog and Bush Hyrax come easy, before heading further south where we find Oribi in their regular habitat on the rock-strewn valleys just north of the famous inselbergs. The morning is wearing on, and we've still got lots of ground to cover, so we head straight for Ngiro-are ranger post near the TZ border, where we know there are a few bat roosts. Here we photograph and record at least 1 Free-Tailed Bat species. We scour the escarpment for Mountain Reedbuck, and we check every marsh and stream for Bohor, but to no avail. It's time to head to our last stop in The Triangle – [Kichwa Tembo](#). We're both a little concerned at this point that we're straggling behind on species numbers and discussing what we could have done differently. How do we have so few rodents? The only place we know of in the triangle to easily see *Arvicanthis niloticus/muansae* Grass Rats is at Purungat Bridge, which is just too far to go for one species.



Oribi (*Ourebia ourebi*)

The forest at Kichwa is superb, and within a short time, we've picked up all 5 of our targets: Tree Hyrax, Red-Tailed Monkey, Blue Monkey, Dwarf Mongoose, and Red-Legged Sun Squirrel. It's time to drive out to the Kichwa airstrip and meet Marc Goss, our friend and helicopter pilot for [Endeavours Far Beyond](#) and the [Mara Elephant Project](#), in his Robinson R44 Helicopter, which the Royal African Foundation kindly sponsored our flying time in. We've known Marc for years, and his flying skills and knowledge of the Mara's landscape and wildlife made him the obvious choice to take us out of the Mara reserve and over the Nguruman escarpment. The R44's doors can be completely removed for 270° visibility, and its manoeuvrability is near unmatched.



Common Dwarf Mongoose (*Helogale parvula*) at Kichwa Tembo



Southern Tree Hyrax (*Dendrohyrax arboreus*)

We still hadn't seen a Black Rhino yet, so the first order of business was to fly over the forest and bush patches we know they frequent. Half an hour later, we still hadn't seen one, and eventually had to make the call to move on. Once on the eastern side of the Mara River, we finally found a pair of Bohor Reedbucks in one of the wet drainage lines south of Ol Keju Rongai. Near Sand River gate, we circled around once or twice looking for Steenbok, but had no luck, and so continued to the cliffs around Olomana in the Naikarra area south of Siana. Here we were able to get good views of Klipspringer, although a photo was out of the question.



Bohor Reedbuck (*Redunca redunca*) near Olkeju Rongai

Further along, as we flew through the valleys of the Forest of The Lost Child (Entim Naimina Enkiyo), finding Guereza Black and White Colobus proved easy. This forest is one of the most sacred sites for the Southern Kenya Maasai, second only to Ol Donyo Lengai (the Mountain of God) just across the border in Tanzania. And anyone who has spent any time in Naimina Enkiyo will know the feeling of peace and joy one feels in such a unique, biodiverse, mystical, and visually stunning place. Marc, Stratton, and I all agree this is one of the most magical places in East Africa, harbouring thousands of plant, bird, mammal, and invertebrate species, but also home to some of the richest cultural traditions of conservation. The old generations are fading, but for hundreds of years, this ecosystem has been protected by powerful Laibons or Oloiboni (ritual & spiritual leaders who hold high standing & respect in

Maasai culture) who have foreseen and mitigated the coming of agriculture, infrastructure development, meddling politicians, and hapless aid organizations. They've kept this forest as it should be, a living, breathing connection to the powers beyond. And yet, as the old Laibons pass, a younger generation, keen to shed the shackles of tradition and to embrace the opportunities of modern education and commerce, are beginning to change the face of this land. Agricultural organizations encourage the Maasai to abandon their traditional lifestyles rearing cattle and take up crop agriculture. Trees are felled, soil is tilled, and the forest is slowly shrinking. On our next big day, we'll surely spend more time here. The more we can expose the challenges the Loita-Nguruman ecosystem faces, the better.



Entim Naimina Enkiyo – The Forest of The Lost Child: Threatened Afromontane forest & sacred site for the Maasai



Lush Afromontane forest below us. Dry, hot scrub ahead. The last valley of the Forest of The Lost Child

We circled back to look for Greater Kudu on the northern end of the Loita hills near Narosura in the drier woodland valleys, but had to call it off after 20 minutes. We can't spend too much time on one species when we have so many more to go and such little time. The time between new species on our list has been growing painfully long the past couple of hours, but we know that will change as soon as we drop down over the Nguruman escarpment to the dry scrub west of Lake Magadi. We make straight for the western tip of the lake where I know there's a lava tube cave. Marc sets us down and suddenly we feel the drastic change in temperature. We've been shivering with no doors up at 2,400 M.A.S.L. flying above the Ngurumans, and now, within minutes, here we are at 600, surrounded by black volcanic rock. Stratton and I clamber over a lava flow to get to the cave where I've seen two species in the past, while Marc flies over to a nearby camp to refuel. We've been starting to doubt our luck, but the Sheath-Tailed Bat (*Coleura afra*) and the Heart-Nosed Bat (*Cardioderma cor*) we'd been hoping for are there.



African Sheath-tail Bat (*Coleura afra*) and Heart-nosed Bat (*Cardioderma cor*)



EFB's Robinson R44 near the shore of Lake Magadi

Once back in the air, we're flying south along the Acacia-wooded shores of Lake Magadi looking for Gerenuk and Lesser Kudu. Eventually a group of Kudu reveal themselves, and then a Cape Hare. Everywhere we go, if we see elephants or dung, Marc is taking waypoints on the chopper's GPS. Even here, zig-zagging across the scorching alkaline flats of Magadi, there are tracks and fresh dung – a testament to the connectivity of the ecosystem and the endless efforts of those who work to protect it. One elephant may not necessarily walk from the Mara to Amboseli, but the two are connected by this crucial corridor where continuous gene-flow keeps each population healthy. As we fly over this vast landscape, the success of the community conservation model adopted by the [South Rift Association of Land Owners \(SORALO\)](#) is plain to see. Biodiversity here is thriving in the seemingly endless swathes of intact habitat of Shompole Conservancy and Olkiramatian Conservancy, at the southern end of the Gregorian Rift. April and May brought good rains, which means there's still plenty of truly golden grass covering the plains, and as the sun drops lower in the sky, we're all in awe of the beauty around us.



A herd of Eastern White-bearded Wildebeest (*Connochaetes taurinus albojubatus*) on the Shompole plains

We're watching our clocks, conscious of the time, and make our way over to the open plains at the base of Mount Shompole. One of us calls out "Gerenuk!", but it's a false alarm (one of many), as a Grant's Gazelle strolls out from under a bush. But there behind it are 2 Fringe-Eared Oryx, the first and only of the day. We decide to circle back to the lake one more time and make our way up to the main Nguruman road that goes around the top of the lake, where I've seen Gerenuk before. Nothing. Marc and Stratton tell me later they'd given up hope at this point. It's a

good thing they didn't tell me at the time because I'm adamant we need this on our list, and just before I give up myself, a Gerenuk ram, ewe, and fawn wander out into the open for Stratton to shoot with the camera.



A Gerenuk (*Litocranius walleri*) ram looks up at the Robinson R44 quizzically as the crazy mammal-watchers high-five

Now we rush back toward [Lentorre Lodge](#), which sits on a little promontory at the base of the Nguruman escarpment, overlooking miles and miles of beautiful Acacia woodland out toward Mt Shompole and the Tanzanian border. Nearly 300m above the lodge, a line of Basalt & Gneiss cliffs loom above the steep escarpment. One doesn't even need to have been up there to know these cliffs are full of hyraxes. A resident pair of Verreaux's Eagles, whose diet consists primarily of hyraxes, make regular flights past the cliffs looking for food, and in the middle of the afternoon, one can hear the characteristic screams of Black-Necked Rock Hyraxes. So we make a quick circular trip around the cliffs for Stratton to frantically fire off a few photos before setting down on the helipad at Lentorre. Once the engine is off, we quickly find some Ochre Bush Squirrels and rush to the one spot where I know there's a maze of Nairobi Grass Rat feeding trails. Sadly, we were too late in the day, after the sun had disappeared behind the escarpment, and the rats are cozy down in their burrows. So we focus on bats, quickly picking up some Egyptian Tomb Bats and an East African Epauletted Fruit Bat in the makuti roofs of the lodge.



Egyptian Tomb Bat (*Taphozous perforatus*)



Ochre Bush Squirrel (*Paraxerus ochraceus*)

We still don't have Unstriped Ground Squirrel, which we know should be abundant down away from the rocks of the escarpment, so we jump in a vehicle and race down below the lodge. Chasing the edge of the escarpment's shadow, we look for movement in the undergrowth, and sure enough, right before we get out into the sun, an Unstriped Ground Squirrel runs parallel to the car, and off into the bush. Without much more to see in the vehicle before sunset, we turn back to the lodge to try for more bats, grab some dinner, and then head out for a night drive.

The food is amazing, the drinks are cold, and while we now have a new burst of energy, we know it won't be long before we both start to fade and lose momentum. There are other guests in the lodge, and they've chosen to stay back and relax, enjoying Lentorre's world-class photographic hide overlooking a little waterhole. Stratton and I both know there's a good chance they might see something we'll miss on our drive, but if we don't go out, we'll never get any more bats or rodents, so off we go.



Emin's Tateril (*Taterillus emini*) – one species we certainly wouldn't have seen sitting in the hide

Much of the standard nocturnal wildlife makes a good show, and we pick up a couple of new species for the day, but after reassuring Stratton while still in Mara North that Senegal Galago wouldn't be an issue, I'm now starting to worry we won't see one at all. We're passing through perfect habitat for them, and they should show up in our thermal scopes or spotlight easily, but there's just no sign of them. As we get down to the Shompole plains, our focus turns to Caracal and Striped Hyena, species this area is famous for, and which I've seen on previous trips. But even these seem to evade our efforts, and we're losing hope.



A Common Genet (*Genetta genetta*) poses obligingly in the *Vachellia (Acacia) tortilis* woodlands of Olkiramatian

Between 20:45 and 23:37 we don't add any new species to our list, bumping along dusty tracks, struggling to stay awake. My spotlight catches eyeshine up ahead – bigger than a Wild Cat, moving through the long grass. We get a thermal scope on it, and it's definitely feline. We're jumping up and down thinking we finally have a Caracal, until it turns sideways to show us its spots, black ears, and short tail – a Serval. While we're a little disappointed it's not a Caracal, it solves our Serval problem from earlier in the day. This can count as our official Serval record, if the method of finding the earlier one is called into question.

We decide to go back to the lodge and sit at the dining area watching the waterhole from a distance for the last half hour while washing down the dust of the day with a cold drink. A Common Genet passes by, but that's not new. A White-tailed Mongoose walks up to the water and then disappears, but by now we've seen so many White-tailed Mongooses in the past 24 hours that we've stopped counting. Two of the other guests emerge from the hide to grab a drink and mention that only an hour before (while we were bouncing around in what felt like a dead-zone), a Leopard had come up to drink from the waterhole, only to be scared off by a determined Striped Hyena. Two species we missed, and they were right here! Just the way it goes, I suppose. We make one last trip to the pump room under the swimming pool, and there, to our delight, is the last species of the day – a group of Cape Roundleaf Bats.



Cape Roundleaf Bat (*Hipposideros caffer*) – Note the parasitic, wingless 'Bat Fly' (Nycteribiidae or Streblidae) that feeds off of blood meals from its host. Bat Flies are very host-specific – if you can ID the bat, in theory, you should be able to ID the fly!

Midnight hits, and we give each other a sleepy high-five. Until we get a chance to send off some images and bat recordings to [Dr. Paul Webala from Maasai Mara University](#), Dr. Ara Monadjem from the University of Eswatini, and Venkat Sankar we won't be certain of some of our bat and rodent identifications, so we try to put any thoughts of breaking records out of our minds. It's time for bed as we've an early start in the morning, flying back to the Mara with Marc.

A few weeks later, the experts helped us finalize our rodent and bat IDs and the list settled at a minimum of 66 species! A new mammal big day WORLD RECORD (see the end of the document for a full list of species recorded, each with the time and location). While this result was extremely satisfying and is a testament to the incredible diversity this landscape holds, we still both felt like we had missed so many species.....

What We Missed

Obviously, being one of the most diverse areas in the world for mammal fauna, there's quite a long list of species we didn't record. As part of the planning process, we made a 'wishlist', dividing potential large mammal species recorded in the region into four categories: 'Easy to find', 'Possible with effort & planning', 'Only possible through sheer luck', and 'Unknown if they occur'. Based on these, our two biggest large mammal species misses of the day were Bat-eared Fox and Senegal Galago, both of which were in the 'Easy' category, and which neither of us had any doubt we'd be able to find. It wasn't for a lack of trying or being in the wrong habitat - I think we just got unlucky with those two.

The list of species we missed in the "Possible with effort & planning" category is long and includes the following: Black Rhino, Bushpig, Greater Kudu, Mountain Reedbuck, Bush Duiker, Weyn's Duiker Blue Duiker, Steenbok, Leopard, Caracal, Striped Hyena, Aardwolf, Golden Wolf, African Wild Dog, Side-striped Jackal, Honey Badger, African Civet, Marsh Mongoose, Slender Mongoose, Aardvark, Temminck's Ground Pangolin, Crested Porcupine, and Small-eared Galago.

On any given day in the ecosystem any of these species are possible and some are easy to see if you are in the right location at the right time. Unfortunately, on a big day you can't be everywhere at the same time.

Now onto rodents and bats.....the two most difficult mammal species groups to come to grips with in the region. We feel like on the big day we did well on bats given our levels of expertise, but *Nycteris thebaica* (Egyptian Slit-faced Bat) proved frustrating as they were absent from their regular roost in the Mara Triangle. There is no other way to say it.... but we failed miserably in the rodent department. Two big misses on the day were *Arvicanthis niloticus/muansae* and *Arvicanthis nairobae*. With better planning both would have been easy. Apart from brief looks at a tree-climbing rodent to start the day, we missed all species of arboreal rodents on the day. This is surprising considering both of us have been able to find thickets rats (*Grammomys sp.*), acacia rats (*Thallomys sp.*), dormice (*Graphiurus sp.*) and climbing mice (*Dendromus sp.*) reliably along our route in the past. One of our biggest regrets was late on the night drive at Lentorre, when we spotted a small Gerbil-like rodent, took a cursory look, and called it a young Emin's Tateril – a species we'd already recorded. In hindsight, it was likely a different species altogether, but in our tired delirium, we didn't put the effort in and potentially lost out on an additional species.

So now the BIG question is – How many mammal species are possible in this 100NM conservation landscape in 24hrs? When you consider what we missed, are 80 mammal species possible in 24 hrs? There is only one way to find out. Records are set to be broken.

Acknowledgements:

We would not have been able to do this mammal big day, much less make an attempt at the world record, without the support (in various forms) of the following people and establishments:

- Peter, Max, & Emma Silvester at Royal African Safaris: Pete's vision, Max's groundwork, and Emma's continued technical support were invaluable.
- The Royal African Foundation: Accommodation, transportation, & other operating costs, where needed, were covered by RAF.

- Adrian & Roisin Allen and the whole team at Serian Camp & Ngare Serian: Gracious, generous hosts who are always keen to get involved in projects like this, and who gave up a room and some precious sleep to help us out.
- Mara West Camp: A very last-minute call only hours before, asking if we could come look for bats was no issue for them, and the askari was ready for us when we arrived. They even had coffee for us by the time we left!
- Adam & Diana Bannister and Robert (Bob) Kiprotich from Angama Mara: Adam's a phenomenal photographer and has a great eye for social media. We couldn't have asked for a better companion. Diana – the amazingly gracious good host who went along with two eager nerds rifling through her kitchen at 6 am. Bob, the eagle-eyed guide with an exceptional knowledge of the triangle and its fauna, and the Angama team who gave us a vehicle and some delicious snacks and lunch for the road.
- Susie & Brian Heath from the Mara Triangle, who seemed not to mind us barging in on breakfast looking for Banded Mongoose, and who run a world-class reserve.
- &Beyond and Kichwa Tembo, who had staff waiting for us on arrival to help us search for our obscure mammal targets and didn't seem to mind us opening all their dining room curtains looking for a bat.
- Marc Goss from Endeavours Far Beyond and the Mara Elephant Project: An excellent pilot, an A-grade conservationist and naturalist, and a great companion for the second half of our day. We're can't express how grateful we were for the use of EFB's helicopter and MEP's time.
- Rob & Sarah O'Meara, the Forest Guardians in Naimina Enkiyo: Although we didn't stop in to Rob & Sarah's they played a big role in the planning stage and have always been great friends. Their endless efforts to conserve the Naimina Enkiyo forest must be applauded. Rob also graciously created a fantastic map of our day and route, for which we're very grateful.
- Raaji Singh Bharij and the whole team at Lentorre Lodge: Raaji will jump through hoops to get involved in anything remotely interesting and provide support. Lentorre's staff were phenomenal and went out of their way to ensure we had everything we needed on time.
- Dr. Paul Webala from Maasai Mara University: Despite having just returned from an international research trip, and being away in the field in the remotest parts of Turkana, Dr. Webala took the time to look at our images and sonograms of the bats we recorded to help us identify them.
- Dr. Ara Monadjem from the University of Eswatini is one of the foremost rodent experts for East Africa and kindly helped us identify some of the species we saw.
- Venkat Sankar: A friend and former client of Zarek's and an experienced mammalogist who freely helped us confirm some of our rodent IDs.

We also want to make one final mention of the conservation importance of the areas in which we conducted our big day and wish to shed light on the following key areas for biodiversity. Perhaps our attempt is a step in the right direction to bring them the attention they deserve and help secure funding to set up or maintain sustainable conservation models for these areas for many years to come.

- Mara North Conservancy (and indeed all the community conservancies within the Maasai Mara Wildlife Conservancies Association umbrella)
- The Mara Triangle, run by the Mara Conservancy, and the Maasai Mara National Reserve
- The Sand River Corridor
- Entim Naimina Enkiyo and the whole Loita/Nguruman Landscape
- Olkiramatian Conservancy, Shompole Conservancy, and the rest of the South Rift under SORALO

The Big Day Mammal-Watchers



[Zarek Cockar](#) (above right): Born and raised in Kenya, Zarek has been going on safari with family and friends since before he could walk. A dedicated (and somewhat nerdy) naturalist and lover of all things wild, from spiders to wildflowers, he's now a professional guide, having attained the [Kenya Professional Safari Guides Association's](#) Gold level badge in 2010. Zarek leads safaris across remote areas of Kenya, looking for lesser-known species like the Crested Rat and Kenya Coast Dwarf Galago. Further armed with widely-recognised guiding qualifications from South Africa, he's often contracted to train other guides in East Africa.

Stratton Hatfield (above left) is a passionate guide, researcher and conservationist. He was born in Zimbabwe to American parents, but his immediate family now lives in Kenya and the Netherlands, and he is proud to call both countries home. Stratton is currently pursuing a PhD at Wageningen University in the Netherlands studying Martial Eagle ecology in the Maasai Mara ecosystem of southern Kenya. He is the director of the Mara Raptor Project – a research and conservation program of the [Kenya Bird of Prey Trust](#) dedicated to raptor conservation in the greater Mara ecosystem. In between work and his PHD he guides for Rockjumper Birding in Africa.

The Species List

We originally started off following the taxonomy presented in Musila, Simon & Monadjem, Ara & Webala, Paul & Patterson, Bruce & Hutterer, Rainer & de Jong, Yvonne & Butynski, Thomas & Mwangi, Geoffrey & Zhongzheng, Chen & Jiang, Xue-Long. (2018). An annotated checklist of mammals of Kenya. *Zoological research*. **40**, as this seemed like the most relevant publication and reference. We however slowly moved away from it as we worked through our species list when we realized some of the bat and rodent taxonomy had changed significantly since that publication. We therefore have followed the taxonomy presented by the American Society of Mammalogists on the [ASM Mammal Diversity Database](#) as it seems to be the most up-to-date taxonomic authority accessible.

Below is the list of species we saw in order of when they were seen, with times, and general location names:

No.	Species		Time Seen	Location
1	<i>Chlorocebus pygerythrus hilgerti</i>	Vervet Monkey	00:02	Serian Camp MNC
2	<i>Afronycteris nanus</i>	Banana Serotine	00:06	Serian Camp MNC
3	<i>Neoromicia somalica</i>	Somali Pipistrelle	00:06	Serian Camp MNC
4	<i>Hippopotamus amphibius</i>	Common Hippopotamus	00:12	Serian Camp MNC
5	<i>Genetta maculata</i>	Large-spotted Genet	00:15	Serian Camp MNC
6	<i>Madoqua kirkii cavendishi</i>	Kirk's (Cavendish's) DikDik	00:23	Serian Camp MNC
7	<i>Pipistrellus hesperidus</i>	Dusk Pipistrelle	00:34	Serian Camp MNC
8	<i>Equus quagga boehmi</i>	Grant's Plains Zebra	00:42	Serian Camp MNC
9	<i>Otolemur crassicaudatus argentatus</i>	Northern Silver Galago	00:48	Serian Camp MNC
10	<i>Lepus victoriae</i>	African Savanna Hare	00:53	Mara North Conservancy
11	<i>Panthera leo melanochaita</i>	Lion	01:08	Mara North Conservancy
12	<i>Crocuta crocuta</i>	Spotted Hyena	01:08	Mara North Conservancy
13	<i>Ichneumia albicauda</i>	White-tailed Mongoose	01:09	Mara North Conservancy
14	<i>Damaliscus lunatus jimela</i>	Topi	01:29	Mara North Conservancy
15	<i>Pedetes surdaster</i>	East African Springhare	01:38	Mara North Conservancy
16	<i>Nanger granti granti</i>	Grant's Gazelle	01:40	Mara North Conservancy
17	<i>Eudorcas thomsonii</i>	Thomson's Gazelle	01:44	Mara North Conservancy
18	<i>Lupulella mesomelas schmidti</i>	Black-backed Jackal	02:01	Mara North Conservancy
19	<i>Syncerus caffer caffer</i>	African Buffalo	02:09	Mara North Conservancy
20	<i>Lavia frons</i>	Yellow-winged Bat	02:27	Mara North Conservancy
21	<i>Giraffa camelopardalis tipperlskirchi</i>	Maasai Giraffe	02:39	Mara North Conservancy

22	<i>Aepyceros melampus melampus</i>	Impala	02:40	Mara North Conservancy
23	<i>Gerbilliscus vicinus</i>	East African Gerbil	03:12	Mara North Conservancy
24	<i>Connochaetes taurinus mearnsi</i>	Western White-bearded Wildebeest	03:38	Mara North Conservancy
25	<i>Ictonyx striatus</i>	Zorilla	03:42	Mara North Conservancy
26	<i>Acinonyx jubatus jubatus</i>	Cheetah	04:02	Mara North Conservancy
27	<i>Kobus ellipsiprymnus defassa</i>	Defassa Waterbuck	04:07	Mara North Conservancy
28	<i>Epomophorus wahlbergi</i>	Wahlberg's Epauletted Fruit Bat	05:25	Mara West (Oloololo Escarpment)
29	<i>Tadarida lobata/fulminans/ventralis</i>	Free-tailed Bat sp.	05:25	Mara West (Oloololo Escarpment)
30	<i>Tragelaphus oryx pattersonianus</i>	East African Eland	05:39	Angama Mara (Oloololo Escarpment)
31	<i>Loxodonta africana</i>	African Bush Elephant	06:28	Mara Triangle
32	<i>Tragelaphus sylvaticus delamerei</i>	Southern Bushbuck	06:31	Mara Triangle
33	<i>Alcelaphus buselaphus cokii</i>	Coke's Hartebeest	07:39	Mara Triangle
34	<i>Leptailurus serval lipostictus</i>	Serval	07:52	Mara Triangle
35	<i>Phacochoerus africanus massaicus</i>	Common Warthog	08:15	Mara Triangle
36	<i>Heterohyrax brucei</i>	Yellow-spotted (Bush) hyrax	09:06	Mara Triangle
37	<i>Ourebia ourebia cottoni</i>	Oribi	09:42	Mara Triangle
38	<i>Mungos mungo</i>	Banded Mongoose	10:00	Mara Triangle
39	<i>Papio anubis</i>	Olive Baboon	10:15	Mara Triangle
40	<i>Tadarida aegyptiaca</i>	Egyptian Free-tailed Bat	10:39	Mara Triangle (Ngiro-Are)
41	<i>Dendrohyrax arboreus bettoni</i>	Southern Tree Hyrax	12:20	Kichwa Tembo
42	<i>Cercopithecus mitis stuhlmanni</i>	Gentle (Stuhlmann's Blue) Monkey	12:21	Kichwa Tembo
43	<i>Cercopithecus ascanius schmidti</i>	Red tailed Monkey	12:23	Kichwa Tembo
44	<i>Helogale parvula rufula</i>	Common Dwarf Mongoose	12:28	Kichwa Tembo
45	<i>Heliosciurus rufobrachium</i>	Red-legged Sun Squirrel	13:07	Kichwa Tembo
46	<i>Redunca redunca wardi</i>	Bohor Reedbuck	13:58	Maasai Mara National Reserve
47	<i>Oreotragus oreotragus</i>	Klipspringer	14:29	Olomana
48	<i>Colobus guereza matschiei</i>	Guereza Colobus	15:03	Entim Naimina Enkiyo
49	<i>Coleura afra</i>	African Sheath-tailed Bat	15:30	Magadi Lava Cave
50	<i>Cardioderma cor</i>	Heart-nosed Bat	15:33	Magadi Lava Cave
51	<i>Tragelaphus imberbis australis</i>	Lesser Kudu	16:22	Lake Magadi woodlands
	<i>Connochaetes taurinus albojubatus</i>	Eastern White-bearded Wildebeest	16:30	Shompole Conservancy
52	<i>Oryx beisa callotis</i>	Beisa (Fringe-eared) Oryx	16:46	Shompole Conservancy

53	<i>Lepus capensis</i>	Cape Hare	16:54	Lake Magadi woodlands
54	<i>Litocranius walleri</i>	Gerenuk	17:01	Lake Magadi woodlands
55	<i>Procavia capensis matschei</i>	Rock Hyrax	17:11	Lentorre
56	<i>Paraxerus ochraceus</i>	Ochre bush Squirrel	17:20	Lentorre
57	<i>Taphozous perforatus</i>	Egyptian Tomb Bat	17:37	Lentorre
58	<i>Epomophorus minimus</i>	East African Epauletted Fruit Bat	17:37	Lentorre
59	<i>Xerus rutilus</i>	Unstriped ground squirrel	17:45	Lentorre
60	<i>Chaerephon pumilus</i>	Little Free-tailed Bat	18:36	Lentorre
61	<i>Taterillus emini</i>	Emin's Tateril	19:46	Olkirimatian Conservancy
62	<i>Gerbilliscus nigricaudus</i>	Black-tailed Gerbil	19:50	Olkirimatian Conservancy
63	<i>Genetta genetta</i>	Common Genet	19:57	Olkirimatian Conservancy
64	<i>Felis lybica</i>	African Wildcat	20:39	Shompole Conservancy
65	<i>Scotoecus hindei</i>	Hinde's Lesser House Bat	20:45	Shompole Conservancy
66	<i>Hipposideros caffer (Clade 2)</i>	Cape Roundleaf Bat	23:37	Lentorre