

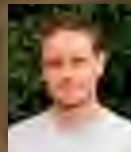
A spotted hyena mother rests with her cub. Adult females weigh up to 75kg and stand 90cm tall at the shoulders, making them one of Africa's largest and most powerful carnivores. They are also highly intelligent, with females dominating each clan's complex social hierarchy.

# THE GOOD, THE BAD AND THE HYENA

Does the spotted hyena deserve its reputation as an ugly, vicious scavenger? **JAMIE MCPHERSON** says not and wishes we could all witness its hunting prowess, complex clan society and adorable cubs. Photos by Suzi Eszterhas

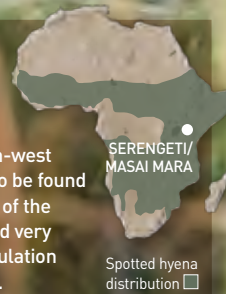
## THE EXPERT

**JAMIE MCPHERSON** is a wildlife cameraman. He spent two months filming hyenas in the Serengeti and Masai Mara for a recent BBC *Natural World* film, and has contributed to many of the BBC Natural History Unit's flagship series, including filming wildcats for this year's *Springwatch*.



## THE LOCATION

The Serengeti-Masai Mara grassland ecosystem spans more than 30,000km<sup>2</sup> of north-west Tanzania and south-west Kenya. Spotted hyenas can also be found on most of the continent south of the Sahara, except in rainforest and very arid desert. South Africa's population has been mostly exterminated.



Spotted hyena distribution



**WE DROVE OUT** of our camp and into the half-light mists of the Serengeti, the Ngorongoro Crater to the east and the Naabi Hills to the south. The sun climbed over the crater rim, slowly illuminating the plains and revealing that they had transformed almost overnight. Instead of endless acres of empty grass, herds of wildebeest now blackened the land, stretching 10, 20, even 30 miles into the distance and beyond the horizon. Their migration was in full swing.

Though millions of words and hours of film have been devoted to this natural phenomenon, nothing compares to seeing it for yourself. In total, 1.5 million wildebeest pass through the Serengeti every year, following the rains and calving as they go. The constant movement of animals and their attendant noises and smells make for a mind-blowing spectacle, not to mention one hell of a buffet, with 250,000 tonnes of fresh meat attracting lions, cheetahs, vultures and – the reason I was here – spotted hyenas.

Together with Charlie Hamilton James, I was making a documentary for the BBC's *Natural World* series. Today was our first morning's filming, and we were hoping for a hunting sequence that would help to dispel the common misconception that hyenas are nothing but craven scavengers. Though these are adaptable creatures that happily scavenge when the opportunity arises – as do lions – they actually hunt and kill most of their food. And with so many unwitting young wildebeest around, it was surely just a matter of time before we saw some action.

But the hunting sequence was only a small part of our plan to paint a more realistic picture of the spotted hyena as an

impressive predator with a complex social life. Admittedly, it is not the most attractive of animals, resembling an unfortunate cat/dog/bear hybrid that has rolled in something nasty, but the view of hyenas as 'bad guys' seems unfairly entrenched in public perception. Hyenas are often overlooked by tourists on safari in Africa, who consider the 'Big Five' to be more worthy of attention. And I was intrigued by the almost unanimous

**DID YOU KNOW?**

Hyenas are highly vocal. The famous 'laugh' is a strange giggling sound emitted when an individual is afraid or excited.

reaction I received when I told people about our project, which was usually a variation on "ugh, they're horrible". I had to wonder what this blinkered opinion was based on – exhaustive research into the behavioural ecology of *The Lion King* perhaps?

But it seems that hyenas were misunderstood long before Disney portrayed them as villains (which, incidentally, drove one hyena researcher to sue for defamation of character). For many years, even the experts were getting it wrong, believing hyenas to be hermaphrodites, since the females have an extended clitoris that resembles a penis. In the

**It seems that hyenas were misunderstood long before Disney portrayed them as villains.**

Serengeti, the spotted hyena's local name also translates as 'spirits of the dead', because the animals were thought to rise magically from the ground at night. The truth is they often disappear into aardvark holes to sleep during the heat of the day, emerging again in the cool of the evening.

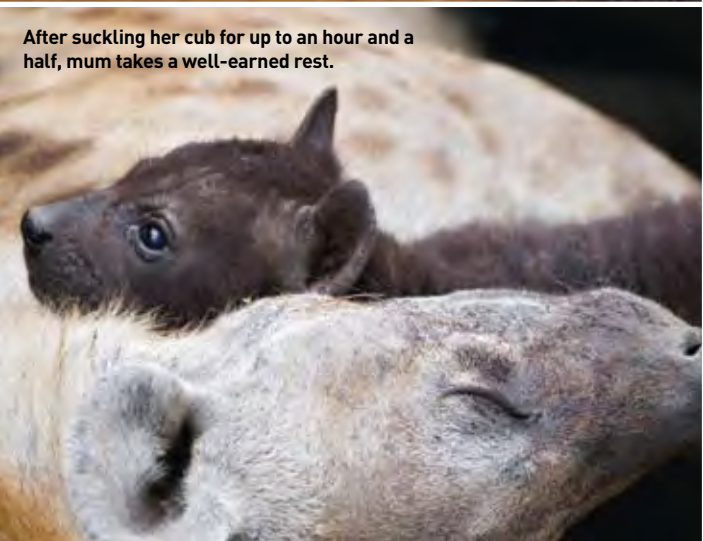
**THE ELUSIVE HUNT**

People tend to change their minds about an animal if you show them something that proves them wrong. So, as we headed out into the wildebeest herds on that first morning to capture the crucial hunt, I was thrilled when a group of 15 hyenas materialised from the mist. We stopped and readied our cameras, but soon realised that they had no intention of chasing anything. Their bellies were so full they were almost dragging on the ground – the clan was heading home.

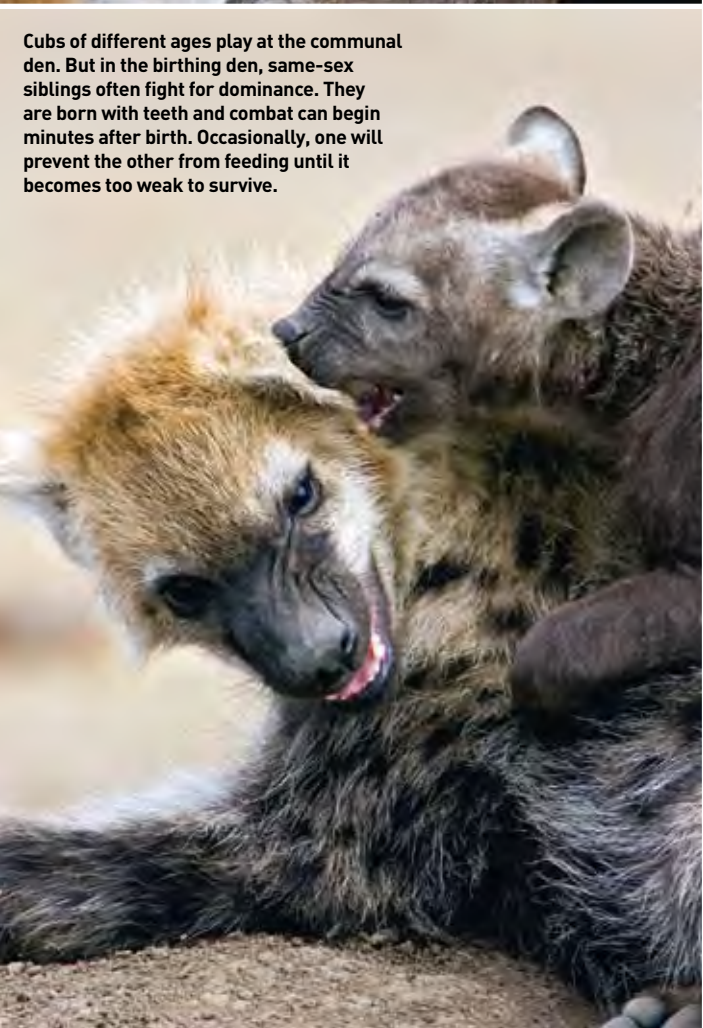
Hyenas have a huge appetite (group living means eating as much as you can as fast as you can) and have been known to consume a third of their own bodyweight in one sitting – that's the equivalent of me eating four Christmas turkeys for lunch. The group waddled past our Land Rover and, unlike most animals, which regard vehicles and



A mother grooms her baby. Though hyenas share dens, females do not care for each other's young.



After suckling her cub for up to an hour and a half, mum takes a well-earned rest.



Cubs of different ages play at the communal den. But in the birthing den, same-sex siblings often fight for dominance. They are born with teeth and combat can begin minutes after birth. Occasionally, one will prevent the other from feeding until it becomes too weak to survive.



Spotted hyenas usually have litters of two young, born after a gestation of four months.

**CLAN LIFE: THE HYENA HIERARCHY**

Unlike many social mammalian predators, spotted hyena clans are dominated by females.

The top animal in any spotted hyena social group is the alpha female, and her cubs rank directly below her. Animals of high rank dominate at kills and thus get more food, but often have to squabble with rivals to maintain their place in the pecking order. The highest-ranking male comes after the lowest-ranking female.

The ever-changing balance of prey and predators on the plains means that the clan has to be flexible. For example, the hyenas may hunt together one day and split up to hunt individually the next. Such adaptability allows them to live at higher densities and in much larger groups (up to 80 individuals) than any other large carnivore.



Hyena mothers warn curious clan members to stay away from their cubs.



After giving birth in an unused aardvark hole, this mother moves her youngster to a communal den. Relocating cubs is fairly common behaviour.

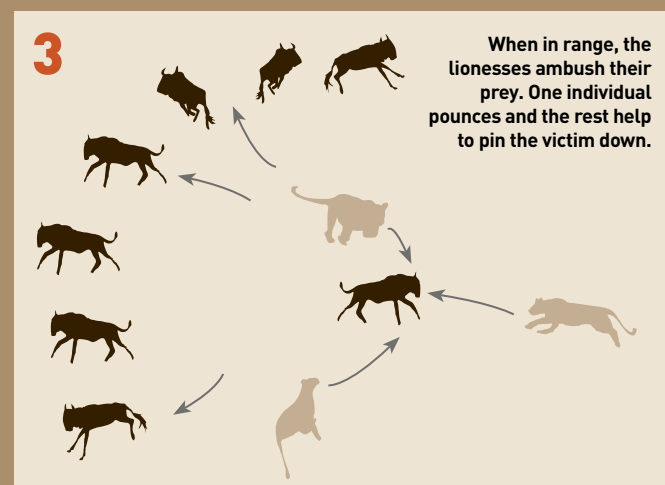
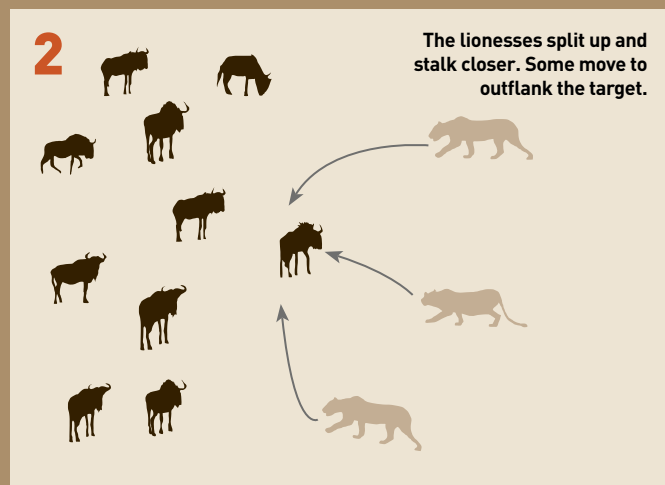
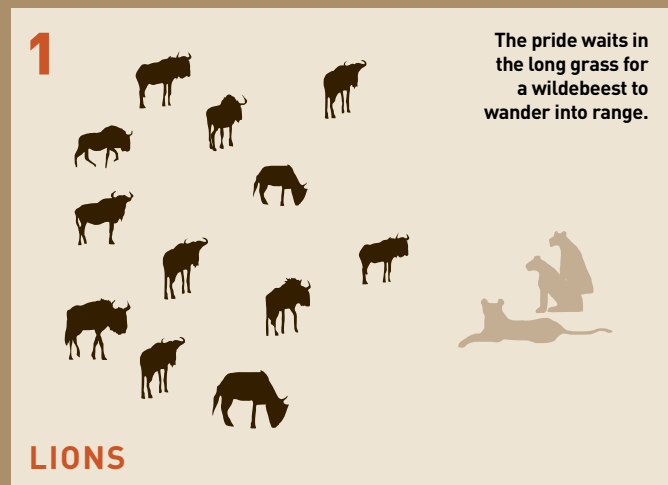
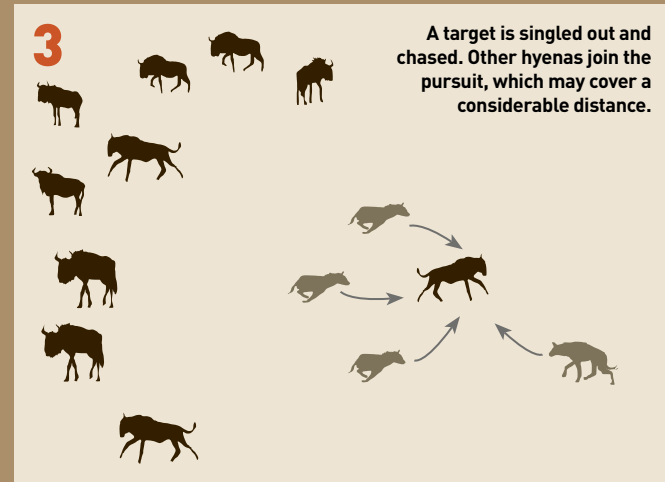
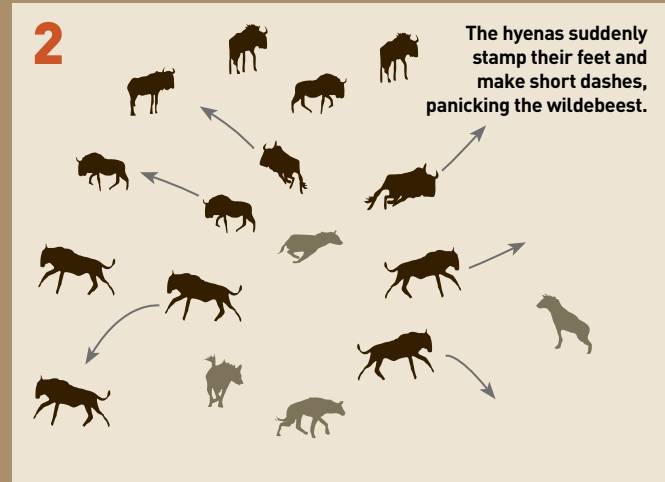
Born with fawn or dark brown fur, young spotted hyenas take at least three years to reach sexual maturity.





# DIFFERENT HUNTING TACTICS: HYENAS vs LIONS

Spotted hyenas sometimes hunt together to isolate and capture prey. The diagrams below illustrate how, in a typical pursuit, their tactics differ from those of the other large communal predators on the East African plains: lions.



their occupants as single metal beasts, looked directly at us, throwing us sideways stares that were unnerving yet slightly comical.

To maximise our chances, we split up. Charlie went in search of a new clan, while I followed the well-fed hyenas back to their den. I hoped they might lead me to the most important element of our film – a cub. But the animals soon divided into smaller groups and disappeared into the long grass. I was no closer to my goal.

As the days passed, we ran into these hyenas regularly and soon identified their daily routine. At dawn, they would hunt or feed on the previous night's kill, then find an aardvark burrow or waterhole in which to cool off. They became active again an hour or so before dark.

### DID YOU KNOW?

Hyenas are viverrids. They are descended from civets and, in evolutionary terms, are closer to cats than dogs.

resting, her youngsters remained safely hidden below ground. In the late afternoon, she would return to repeat the routine.

With this pattern, the middle of the day was quiet. To avoid falling asleep to the gentle lullaby of a million mooing wildebeest, I would scan the skies for vultures. They always

lead to a kill and, in turn, more hyenas and lions. Like feathered fighter planes, the birds would come in to land, often in huge numbers, and squabble over a single carcass. The vultures were usually accompanied by a handful of marabou storks, which would float to the ground like black

umbrellas. The scene resembled a macabre circus – the vultures would posture and fight, constantly screeching and clucking at each other, while the storks would strut around the

### FINDING THE DEN

One afternoon, I came across a member of the clan walking alone. It was a female, and her distended nipples meant she was probably suckling young. I followed her quietly through the wildebeest, and eventually she led me to a new den. This was extremely promising. I watched through binoculars as she approached the entrance, poked her head inside, then lay in the dust close by. Within seconds, a tiny black head appeared in the hole. It was too good to be true – we finally had a cub, just a few weeks old. She would eventually be named Naabi and become the star of our film.

Then, things got even better. A second, smaller youngster emerged and started feeding alongside its sibling. I filmed from a distance, careful not to move too close in case I spooked their mother. I crept away at sunset, praying that she wouldn't relocate her cubs during the night. Finding the den again the next morning wasn't easy, hidden as it was in a sea of grass and ever-shifting herds of wildebeest. Eventually, I spotted the family through a gap in the grazers. Thankfully, they had stayed put.

As the weeks passed, I moved closer and closer to the den and watched a pattern emerge. The mother would suckle her cubs and play with them for an hour or so each morning before moving a few hundred metres away to sleep. While she was

Well-fed and resting, three youngsters keep a casual watch on passing wildebeest.

## They waddled past the Land Rover, throwing us sideways stares that were unnerving yet comical.

edge of the mêlée like sinister ringmasters, looking to pilfer offal or rib bones.

Despite my progress with the hyena family, I still hadn't seen any hunting behaviour, and the news from Charlie was no better. We'd both witnessed a few attempted hunts, but hadn't managed to get any decent footage. All too often, the hyenas simply vanished among the wildebeest or melted into the heat haze.





Finally, Charlie struck gold. He managed to capture an exciting chase through the herds, which culminated in a final lunge and a set of powerful hyena jaws snapping shut across the back of a young wildebeest.

### THRILL OF THE CHASE

Hyenas have a different hunting strategy to lions and cheetahs. Their initial style is subtle, nonchalant even. They work the crowds by ambling along and occasionally making short dashes or stamping their front feet like playful dogs to panic the wildebeest, then simply stand back and watch. This apparent disinterest belies an acute alertness to any opportunities they can exploit – a young or sick animal, or one that has strayed too far from the safety of the herd, is fair game.

Once a target is spotted, the chase begins. A single hyena is quite capable of bringing down an adult wildebeest, but the animals also hunt in pairs and small groups, and a pursuit initiated by one individual often attracts others. And believe me, hyenas can

**I had to admire their gory simplicity – your prey can't run away if you've just eaten its legs.**

move. I'd clocked them at 45kmph playing alongside my Land Rover as I drove back to camp in the evenings, easily keeping up while still casting me sidelong glances and biting each other on the bum.

The climax of the hunt is dramatic but not pretty. While lions and cheetahs are equipped to suffocate their prey, hyenas don't have the physiology or inclination. Instead, they just start feeding. I had to admire their gory simplicity – your prey can't run away if you've just eaten its legs.

### HYENA PLAYTIME

Meanwhile, I was getting some great footage of Naabi and her sister. They often came out to say hello before their mother arrived, approaching my vehicle and sniffing around the filming door. Like clockwork, the female would amble over at 5pm – I could now recognise her relaxed gait from a distance. She'd wander up to the den, cast me a weary look and call to her cubs with a deep growl before flopping down on her side, putting up a small cloud of warm dust.

Spending time at the den was wonderful. Naabi and her sibling were very playful and extremely cute. Their mother would allow

#### DID YOU KNOW?

Hyenas rely on their clan for back-up when tackling or defending themselves against lions. On average, it takes three hyenas to drive off a single lioness and at least seven to see off a male.

them to bite her ears and scramble all over her. She would join in their games, gently lifting them up and flipping them over with her massive jaws. It was clear that she was a doting parent and their bond was very strong. Other, older cubs, whose black coats were just moulting into the spots of adulthood, would often come and play, too.

At dusk, the entire clan would socialise around the den before heading out for the evening's hunt. I got to know them all – the juveniles, the hang-dog males, the battle-scarred females and one particularly mouldy old girl who'd lost a leg. One of the most fascinating things I witnessed was the cubs greeting other clan members. They had inherited

their mother's rank in the hierarchy and were dominant to all but her. As others approached, the youngsters would morph from cute cubs into mini, hyena-shaped beasts, puffing out their chests, stiffening their front legs and bristling their tails. Resembling tiny bulldogs, they forced adults 10 times their size to cock their legs in submission.

On our final evening, Naabi and her sister played contentedly beside their mother with the severed leg of a wildebeest calf. It was too dark to film, so I just sat and watched. Seeing them together in the fading light, it was hard to believe that anyone could fail to be won over by their mischievous charisma and charm.

**Naabi: A hyena princess** was broadcast in spring, but should be repeated later this year or in 2009.

## LIFE ON THE ROAD: COMMUTING FOR FOOD

Though migrating wildebeest cover huge distances each year, female hyenas often travel three times further, since they must constantly roam from den to herd and back to den in order to feed their young. Low-ranking females are often forced to hunt on the fringes of the clan's territory and may make up to 50 long-distance trips per year to find food, covering 3,500km in total. As a result, their cubs tend to be fed only once every 3-4 days. Alpha females, however, dominate the territory, hunt anywhere they like and have first access to every kill. They probably travel half the distance of their subordinates and may be able to feed their cubs as often as twice a day. As a result, their offspring develop more quickly, gaining both physical and social advantages.



The open plains of East Africa can be a lonely place when the wildebeest herds have moved on.