

Unbeatable Cat: The Cheetah

by Despina Rosales

The cheetah is a remarkable athlete. With its top sprinting speed of 115 kilometres per hour, it's the world's fastest land animal. Taking just a step or two to accelerate to freeway speeds, the cheetah would *always* win if there were African Animal Athletics - no other animal would stand a chance.

The Racing Car Of Cats

A cheetah's body is built for speed. Its little head, small collarbones, and vertical shoulder blades mean less wind resistance when running. And a long, slender body weighing between 36 and 64 kilograms means this cat is light on its feet.

Small teeth allow room in the cheetah's skull for large nasal passages, so that there is plenty of oxygen intake while dashing after prey. The animal's big lungs also help air intake, and extra-large liver, heart and adrenal glands create a rapid physical response when the cheetah breaks into a sprint.

A cheetah's exceptionally long, powerful legs allow it to take huge strides, but it doesn't *just* use its legs when it goes full pelt. The cat's spine acts like a spring so that it can use its whole body to run, giving each step added reach.

Cheetahs can be up to 150 centimetres long, with an additional 70 to 81 centimetres in tail length. This disproportionately long tail is used for balance and acts like a boat's rudder, allowing the cheetah to dart suddenly in a different direction without slowing down at all.

Deadly Hunters

Unlike other wildcats, the cheetah almost always hunts during the day and, like a dog, runs down its prey rather than stalking it.

Before making an all-out sprint, the cheetah sneaks up on its prey. It creeps slowly and quietly, head low to the ground, its spotted coat helping to camouflage it.

Then, when it's about 50 metres away, the cheetah rushes out, accelerating from zero to 80 kilometres per hour in two seconds flat. Cheetahs can chase for up to five-and-a-half kilometres at that speed. If necessary, they'll accelerate to highest velocity of up to 115 kilometres per hour, but only for around 250 metres - about 10 seconds.

In this surprise attack, the prospective victim is fast on its feet too, fuelled by a desperate desire to survive. But if the cheetah manages to get close enough, it takes an enormous leap and lashes out with a front paw, catching the hind leg of the animal, tripping it and bringing it to the ground.

A very small creature (like a hare) is then killed by a simple bite through the skull. But a bigger animal has to be suffocated: the cheetah latches onto the prey's throat with its jaws and clamps the windpipe shut until the animal is dead.

Fast Food – But Not The Kind You're Thinking Of

Springbok, the cheetah's main source of food in southern Africa, is a swift animal that will sometimes outlast and outrun the deadly sprint of the cheetah.

At other times, the speed of its prey is not what stands between the cheetah and a meal, but rather maternal protectiveness. For example, the mother of a baby wildebeest will try

to fight off an attacking cheetah. Sometimes she will win and run the cat off, occasionally injuring or killing it.

So the outcome of a chase is never certain, and the cheetah has more misses than kills when hunting. This is normal in the wild. However cheetahs are skilled hunters, capturing their prey about 40 percent of the time. It doesn't sound like a lot, but that's a high success rate for a wild animal. And it needs to be high because spend so much energy chasing their prey. Too many failures and they'll have no energy - or fuel - left to continue hunting.

In Need Of Theft Insurance

As hard as it is for cheetahs to *get* food, it's nearly as hard for them to keep it.

A lion will often try to steal the cheetah's freshly killed meal. Because the cheetah works so hard for its food, it's sometimes so exhausted from the chase that it can't prevent a thief from walking off with it. And even if the cheetah has the energy to fight, it has little chance against the larger, stronger lion.

And then there is the hyena, with its unerring sense for an easy meal, which zeros in on the cheetah's kill. The timid and small-jawed cheetah backs off - it knows that it will not be able to defend its food against an adversary with such powerful jaws.

Unlike hyenas and lions, a cheetah must kill almost everything it eats and when its food is stolen, it must undertake the difficult task of hunting again. To avoid this, it tries to thwart lion hold-ups and thieving hyenas by hauling its meal up into trees and eating it quickly.

First the cheetah eats the heart and kidneys. Then, after drinking the animal's blood, it eats the head, and finally the muscle and meat of the carcass. It doesn't eat the skin, bones or entrails.

Unlike other cats, such as tigers, the cheetah does not return to a kill to eat again. After the first feed the cheetah simply walks away, face and front paws drenched in blood, off to a safe place to sleep the meal off.

Then, after a snooze, it's time to hunt again. The chase is back on - not just for food, but to win the most important race of all: the race for survival.

More Cat Facts:

One Very Old Cat Not only is the cheetah faster than other big cats such as lions, tigers, leopards and jaguars, it's also older as a species. It evolved around 5.5 million years ago, while most other big cats evolved about only 1.5 million years ago. That's why a cheetah's scientific name doesn't begin with *Panthera* like the those other cats - it has different ancestry.

Status: Endangered Cheetahs were once common throughout Asia, Africa, Europe and North America. Then at the end of the Ice Age (about 10,000 years ago), massive climatic changes caused it to disappear completely from Europe and North America.

There are still cheetahs in Asia, but most live in eastern and south-western Africa. Only around 10,000 remain in the wild. And with that number getting smaller all the time, this feline's future is uncertain.

Live Fast, Die Young The cheetah's life is relatively brief, often less than 10 years. As speed is essential to this cat's survival, even a simple foot injury might be the beginning of the end for a cheetah in the wild. Many cubs never even make it to adulthood. They are killed by disease, starvation or an attack by lions or hyenas.

Conflict with ranchers often results in its life being cut short, and the building of cities means its natural habitat is constantly reduced, making life more and more difficult for the resourceful cheetah.

Cheetah Chit Chat As you know, cheetahs are cats, and sometimes they sound exactly like cats. For example, a contented cheetah purrs like an overgrown housecat. Staccato purring is used by males when courting a female, and by mothers to tell cubs to follow closely.

But often cheetahs don't sound like cats at all: they bleat like sheep when distressed; and when they're angry, they use a combination of dog sounds (snarling and growling), snake sounds (hissing), and even human sounds (coughing).

"Nyam-nyam" is the noise cubs make while feeding, but when they argue over a kill they make whirring and squealing noises. And mothers have their own special language to communicate with their cubs. Mothers use a short, high-pitched call to warn the cubs to stay still, and a churring sound (a soft, high-pitched growl) to summon them out of hiding.

The sound "ihn-ihn", alternated with chirping, tells the cubs to come to mum, and being far away is no defence for not coming when called. Cheetah cubs can't use the tired old excuse, "I didn't come because I didn't hear you." No. When Mama Cheetah chirps, it's no bird chirp we're talking about. This is a chirp that can be heard up to two kilometres away!

A Doggish Cat... This cat has some distinctly canine characteristics. For example, a cheetah cub can be taught to play doggie games such as fetch, and can even be trained to go hunting with humans - just like a dog!

It has rigid paw pads and non-retractable claws. Having these dog-like paws is like you having fancy-schmancy running shoes: they give good traction for running and extra grip for sudden stops and turns.

...But A Cat All The Same Cheetahs, like most cats, are mainly solitary creatures. Females live on their own (except when they have cubs, which they raise for about a year) and males usually live with a small group of brothers. Males and females only get together to mate.

And typical of cats, cheetahs like to climb. They depend on sight, rather than smell, when it comes to finding food, so they often climb up trees to use them as vantage points in the never-ending search for a meal.