

# Even Usain Bolt can't beat greyhounds, cheetahs... or pronghorn antelope

July 27 2012

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Even Usain Bolt, currently the fastest man in the world, couldn't outpace greyhounds, cheetahs, or the pronghorn antelope, finds a light-hearted comparison of the extraordinary athleticism of humans and animals in the *Veterinary Record*.

As Olympic competition starts in earnest today, Craig Sharp from the Centre for [Sports Medicine](#) and Human Performance at Brunel University, highlights a range of animals whose speed and strength easily trumps that of our most [elite athletes](#).

Humans can run at a maximum speed of 23.4 miles per hour (37.6 kilometres/hour) or 10.4 metres per second, which gives them the edge over the Dromedary camel.

But only just, as these animals can run at a top speed of 22 mph (35.3 kph) or 9.8 metres/second.

A cheetah is around twice as fast as the world's top sprinters at 64 mph (104 kph) or 29 metres/second. But the [pronghorn](#) antelope also puts in a very respectable 55 mph (89 kph) or 24.6 metres/second.

And let's not forget the North African ostrich, which at 40 mph (64kph) or 18 metres/second, is the world's fastest running bird. Or sailfish, which reach a swimming speed of 67 mph (108 kph) or 30 metres/second.

Then, of course, there are thoroughbred racehorses, the fastest of which has managed 55mph (88kph), and greyhounds at 43 mph (69kph).

And birds would win a few gold medals too. [Peregrine falcons](#) can reach speeds of 161 mph (259 kph), while ducks and geese rival [cheetahs](#), with speeds of 64 mph (103 kph) in level flight.

And when it comes to power, pheasant and grouse can generate 400 Watts per kilo—five times as powerful as trained athletes. The tiny hummingbird can manage 200W/kg.

And in terms of strength, an African elephant can lift 300 kg with its trunk and carry 820 kg. A grizzly bear can lift 455 kg, while a gorilla can lift a whopping 900 kg.

Human beings have adapted fantastically well to marathons and long distance running, says Professor Sharp—long legs, short toes, arched feet and ample fuel storage capacity all help.

But they might find it hard to beat camels, which can maintain speeds of 10 mph (16kph) for over 18 hours, or Siberian huskies, which set a record in 2011, racing for 8 days, 19 hours, and 47 minutes, covering 114 miles a day.

And just to set the record straight...

- Usain Bolt ran 100 metres in 9.58 seconds; a cheetah ran the same distance in 5.8 seconds
- Usain Bolt ran 200 metres in 19.19 seconds; a cheetah covered the same distance in 6.9 seconds, Black Caviar (racehorse) in 9.98 seconds, and a greyhound in 11.2 seconds
- Michael Johnson ran the 400 metres in 43.18 seconds compared

with 19.2 seconds for a racehorse and 21.4 seconds for a greyhound

- David Rushida ran 800 metres in 1 minute 41 seconds, compared with 33 seconds for the pronghorn antelope and 49.2 seconds for a greyhound
- An endurance horse ran a full marathon in 1 hour 18 minutes and 29 seconds, compared with the 2 hours, 3 minutes and 38 second record of Patrick Makau Musyoki
- In the long jump, a red kangaroo has leapt 12.8 metres compared to the 8.95 metres Mike Powell achieved. Its high jump of 3.1 metres exceeds Javier Sotomayor's at 2.45, who is also trumped by the snakehead fish, which can leap 4 metres out of the water

"Citius, Althius, Fortius [Faster, Higher, Stronger] is the Olympic motto, but if we allowed the rest of the animal kingdom into the Games, and it was to select the peregrine falcon (161 mph), Ruppel's vulture (37,000 feet) and the 190 ton blue whale as its representatives, we could not offer much competition," writes Professor Sharp.

"Or even if restricted to terrestrial animals, we could be up against the cheetah (65 [mph](#)), the red kangaroo (3.1 metres) and the 12 ton bull African elephant—worth a thought when viewing the adulation given to our species' Olympic outliers in July," he continues.

But no single species matches the physical versatility of human beings, he concludes, and that is what the Games are designed to display to best effect.

**More information:** Animal athletes: a performance view *Veterinary Record* July 28; 171; 87-94

Provided by British Medical Journal

Citation: Even Usain Bolt can't beat greyhounds, cheetahs... or pronghorn antelope (2012, July 27) retrieved 6 May 2024 from <https://phys.org/news/2012-07-usain-greyhounds-cheetahs-pronghorn-antelope.html>

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