# Average movement speeds

Human –

Overall 5.59mph (9km/h)

Usain bolt’s fastest speed 28mph in the 100m sprint

For a 7 minute mile you would have to run at ~8.57mph (60 mins / 7 = 8.57)

<http://www.onaverage.co.uk/speed-averages/average-running-speed>

<https://www.livescience.com/8039-humans-run-40-mph-theory.html>

Tyrannosaurus Rex (Large carnivore analogue, about 1.5-1.75x the height of a human) –

Speed estimates range between 11-45mph (18-72km/h), most estimates are around 25mph

Recent estimates (Jul 2017) suggest that the Tyrannosaurus Rex could not have exceeded 12 mph without shattering foot bones

<https://en.wikipedia.org/wiki/Tyrannosaurus>

<https://news.nationalgeographic.com/2017/07/tyrannosaur-trex-running-speed/>

Sauropod (Large Herbivore Analogue, about 2.5x the height of a human)

Estimates for the speed of the brachiosaurus are 10mph

Similar dinosaurs of the same clade, the Apatosaurus smaller than a brachiosaur is estimated to have moved at 12-19mph. One of the largest sauropods (the argentinosaurus) moved at an estimated speed of 5mph.

<http://www.dinopit.com/brachiosaurus/>

https://en.wikipedia.org/wiki/Apatosaurus

<http://www.telegraph.co.uk/news/science/dinosaurs/10415137/Walking-with-dinosaurs-how-80-tonne-giant-Sauropod-moved.html>

Utahraptor (small carnivore analogue, about the height of a human) –

Some estimates say that utahraptor could run up to about 20 mph for about 5-10 seconds

They relied more on being adept fighters than on their speed

<https://www.dinosaurhome.com/utahraptor-research-part-3-weapons-diet-speed-and-agility-117.html>

<http://www.bbc.co.uk/nature/life/Utahraptor>

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Small herbivore

This dinosaur model was based on the Atlascopcosaurus which we have very limited knowledge of due to the only fossil find being a jaw, which when compared with other dinosaurs was estimated to be 2-3m long, this dinosaur is of genus rank, and is thought to be a member of Ornithopoda.

For the sake of argument and due to the lack of information on the subject, for this dinosaur I will assume that it can run at around 15-17.5 mph, slightly slower than the utahraptor

<http://www.nhm.ac.uk/discover/dino-directory/atlascopcosaurus.html>

http://www.prehistoric-wildlife.com/species/a/atlascopcosaurus.html