

Am I Speedy or Slow?

Courtesy of Wildlife of Gondwana Activity kit, PrimeSci!, Monash University

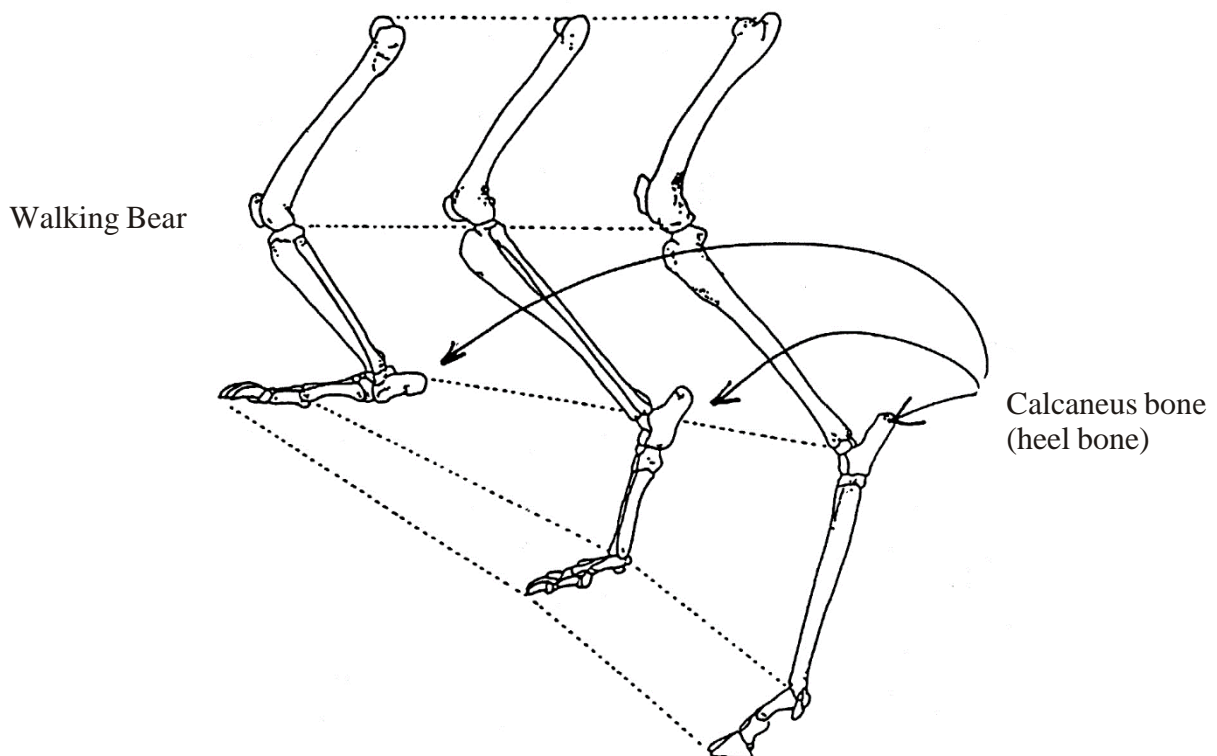
On the diagram below, look at the legs of a walking bear, a running dog and a fast running deer.

Notice how the bear has two main "sections" to its legs whereas the dog and the deer have three.

The longer the lower third section of the "leg" in an animal, generally the faster the animal is able to run. This lower section is the metatarsal area, part of the foot in humans, but in quickly running animals, really an extension of the leg. The bit that sticks out from the top of the lower section at the back is really the "heel"!

The length of the lower leg is related to the speed the animal can move. The longer the stride the faster an animal can cover ground. Also, animals that are fast, stand up on the tips of their toes (they are digitigrade), rather than walking "flat-footed" (plantigrade).

Comparison of the legs of animals that spent most of their time walking or running (modified from Hildebrand, 1974).



Give reasons why these animals were fast or slow

