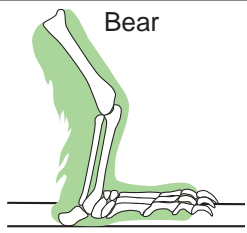
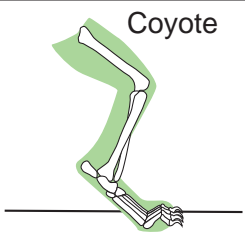
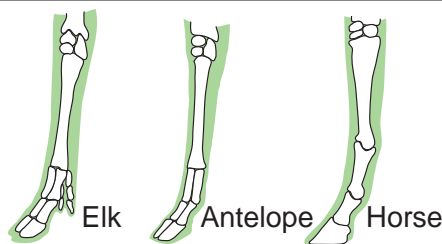





# Animal Locomotion and Track Patterns



Type of Locomotion	Plantigrade	Digitigrade	Unguligrade
<b>Description</b>	The formal term for “whole foot” locomotion. When humans walk, they plant the heel of the foot, roll forward the length of the foot, and then push off with the toes, creating a track that shows the heel, sole of the foot, and toes.	Tracks show the pads of toes and the ball of the foot. Animals, such as mountain lions, stand and walk on their toes or digits, with their heels permanently raised. When we see birds walking or hopping, what looks like the bird knee is actually the ankle! When humans walk on “tiptoes” they are walking digitigrade.	Animals stand and walk on the very tips of their toes, which are protected by hooves. Tracks often cut deep into the soil or snow due to the heavy weight of the animal. Tracks may be from one toenail (e.g., hoof of a horse) or from two toenails (e.g., hoof of a cow, deer, elk, moose). A human would have to grow long toenails and fingernails and plant only those nails on the ground to walk this way!
<b>Animals Examples</b>	Bears, rabbits and hares, rodents, raccoons, weasels, skunks and hedgehogs, marsupials, humans	Cats, dogs, birds	Horses, deer, sheep, goats, cattle, giraffes, hippopotamuses, camels, rhinoceros, tapirs, and antelope
<b>Leg Bones Structure</b>	 Bear	 Coyote	 Elk Antelope Horse

4 Basic Gaits	Animal Body Shape	Track Pattern Description	Examples
<b>Pacers (or waddlers)</b>	Front feet and hind feet shaped differently; bodies wide and heavy set; relatively short legs	Shows distinct front and hind footprints with a front and back footprint right next to each other	Raccoon, opossum, muskrat, groundhog, bear
			
<b>Diagonal walkers (or perfect steppers)</b>	Long-legged animals with front and back feet of similar size and shape	Appear as a nearly straight line of single prints.	Human, deer, dog, cat
			
<b>Bounders</b>	“Jumping” animals; have long bodies and short legs; feet are of similar size	Grouped in repeating sets with the hind tracks placed near the front tracks	River otter, weasel, fisher
			
<b>Gallopers (or hoppers)</b>	Typically have two large hind feet and small front feet	Set of four with the large hind feet tracks to the front and outside of the small front feet tracks	Rabbit, hare, squirrel, mice
	