



Dire Wolf



Dire Wolf / Canis Dirus (NPS Photo)

Thanks to fantasy shows like *Game of Thrones*, dire wolves have worked their way into popular culture, with many people having at least heard of these larger cousins to modern canids. Dire wolves, however, are not a fantasy; they really did walk the earth a long time ago!

Currently the oldest-known fossil dates back to 252,000 years ago, which means dire wolves (*Canis dirus*) were predators of the Pleistocene epoch. At this time, they were one of most common of the larger carnivores in North America.

Dire wolves are basically large wolves, so they probably looked a lot like their modern canine counterpart, the gray wolf. Interestingly, gray and dire wolves coexisted during the Pleistocene epoch. Gray wolves evolved in Eurasia and later crossed over to North America, while dire wolves evolved in North America. As a result, both species lived in North America around the same time and were even about the same size. Dire wolves, however, had a heavier, more muscular build. They stood about 2.6-2.8 feet tall (80-85 cm) and weighed about 130-150 pounds (60-68 kilograms), with eastern dire wolves (subspecies *Canis dirus dirus*) being slightly heavier than western dire wolves (subspecies *Canis dirus*

guildayi). All dire wolves had a larger head for their body size than gray wolves. They had large teeth and powerful jaws with a stronger bite than modern wolves. Some paleontologists believe that they could crack open bones like hyenas.

The muscular build, powerful jaws, and sharp teeth of dire wolves made them menacing predators. They probably hunted in packs like modern wolves, a theory that is supported by the sheer number of dire wolf fossils found at sites like the La Brea Tar Pits in California. This pack-hunting, as well as their large size, allowed dire wolves to hunt large animals, such as horses and bison. In contrast, the smaller gray wolves would have had to stick to smaller prey. Dire wolves may have also scavenged kills from other predators, like saber-toothed cats, to supplement their diet when prey was scarce.

Dire wolves managed to hunt and scavenge their way across both of

the American continents. Although a more common find in North America, their fossils have been discovered from Alberta, Canada, all the way south to Peru in South America. Within this enormous range, dire wolves would have lived in a number of different habitats, like forested mountains, grasslands, plains, and arid savannahs. Based on the fossilized canine footprints found here at White Sands National Monument, dire wolves probably lived here too, back when White Sands was a giant lake and lush grasslands.

