

Elephant Nose: An Elephant's Sense of Smell

Debbie Ethell: There is something VERY important happening here.

You can tell just by looking at an elephant skull that whatever these holes are for, they must serve an incredibly important function because just look at how much real estate they take up.

I'm Debbie Ethell, executive director of The KOTA Foundation for Elephants as well as a conservation research scientist.

An elephant's sense of smell is probably one of its most important senses. As elephants inhale air it passes through the nares and over the olfactory bulbs located at the base of the elephant's brain. These are the largest of any mammal on earth.

Dogs have always been considered to have the greatest ability to pick up a scent, especially Bloodhounds or German Shepherds. There are more than 1000 genes in a dog's nose dedicated to scent alone. Compare that to a human. We only have about 400.

But an elephant has roughly 2000 genes dedicated strictly to scent alone and when you compare these to its eye sockets which are much smaller in comparison you can tell that its sense of smell is incredibly important. And what that also means is that an elephant can detect a scent nearly two times farther than a Bloodhound or a German Shepherd.