

*// Rodents' smells will generate precise and predictable reactions within the brain //*

of ways. To start, their hearing is so acute that it can pick up noises well into the ultrasonic, and the reasons for this may be two-fold.

The first of these is for communication, but maybe not in the way you imagine. Rodent pups are born small, hairless and very vulnerable, in fact almost every predator out there would happily snaffle them up like delicious jellybeans the moment mum leaves the nest. Therefore, it is of utmost importance that if the pups need to call out for mum, they do so in a way that doesn't instantly flag up their position to every potential predator in the area. To do this, rodent pups will call out in ultrasonic squeaks.

Ultrasound is a fantastic tool for this purpose because not only will it be outside the normal hearing range of most animals, but it also travels very poorly. Whilst at first glance the latter of the two might not seem like a benefit, but when you consider the pups are trying to call mum, if she is close enough to do something proactive, she will return, but if she is not then you don't want that cry for help peeling around the environment, alerting all the other animals which can hear it to your location.

The other benefit from a rodent's adaptation to ultrasound is that it is believed that rodents do possess a rudimentary ability to echolocate. This sense is nowhere near as advanced as that of



The large gap between the incisors and the molars helps rodents decide whether the substance they've just gnawed is suitable for consumption

*// Observe the site calmly or set cameras that can observe discretely //*

their cousins the bat, but it is sufficiently advanced that rodents being observed in total darkness (such as sewers) trying to traverse over vertical ledges are seen to hang their heads over the edge and 'wobble'.

Rodents will repeat the motion until they come to a part of the ledge where the distance between edge and floor is manageable, giving rise to the assumption that rodents are using sound to gauge distance.

Using this to our advantage teaches us the art of patience. It is almost a certainty that when you arrive on site, all the rodents there will be aware of you. Marching from pillar to post, moving things and generally making a ruckus will ensure that all rodents on the site will remain firmly ensconced in their hiding spots, unless decidedly brazen.

If you have the opportunity observe the site calmly or set cameras that can observe discretely then do so and see what you can learn.

The greatest tool we have at our disposal is to 'know our foe'. We can take these observations and extract from them the tactics required to implement ever more successful strategies.

Even the apparently unimportant nuances of behaviour we all so often dismiss as academic or trivial can all be repurposed and restructured to increase the efficacy of all of our treatments. 



The arrangement of rodents' whiskers ensures such sensitivity to easily determine the slightest changes in the texture of surfaces as well as sudden changes in air pressure