Ultrasonic Behaviors

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The purpose of this experiment is to use multi-sound waves to visually see the behavioral changes of a Pink-toe tarantula known as the Avicularia Avicularia. Sound is produced when something vibrates. The vibrating body causes the medium (water, air, etc.) around it to vibrate. Sound waves consist of areas of high and low pressure called compression and refraction, respectively. During this procedure glasses were used as vessels in order to resonate sound. Every material such as glass has a frequency, called resonant frequency. As expected, deep wide glasses give a darker pitch; while more narrow ones give a higher pitch. First a group from (80-130hz) was selected. Then it was divided into two groups: (80-100) and (100-130). Group 1 (80-100hz) was placed in an outer box as the glasses resonated reactions of the tarantula were written down. After collecting data, group 2 was used (100-130hz) after they were being played; the sound waves traveled causing a certain reaction towards the tarantula. All data records were written down. The Pink-toe tarantula reacted in different ways to both groups. As predicted ultrasound does affect Arachnids. As a matter of fact, it takes between 80-130hz to determine certain behavior. This could be very useful to us as humans to have a safe home environment; free from bugs, arachnids' reptiles, and other possible dangerous animals. These animals will no longer be exterminated, instead they would be startled away by certain ultrasound vibrations.

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