



ANIMALS AND AUDIO

Sounds from your pet's perspective

While people enjoy what we consider to be a rich range of sounds, our everyday hearing pales in comparison to our furry or feathered friends. Able to recognize sounds far lower or higher than our ears can accommodate, many pets enjoy a world of sound we can't appreciate. Learn a little about what their ears experience—and perhaps what you should be listening for, too.

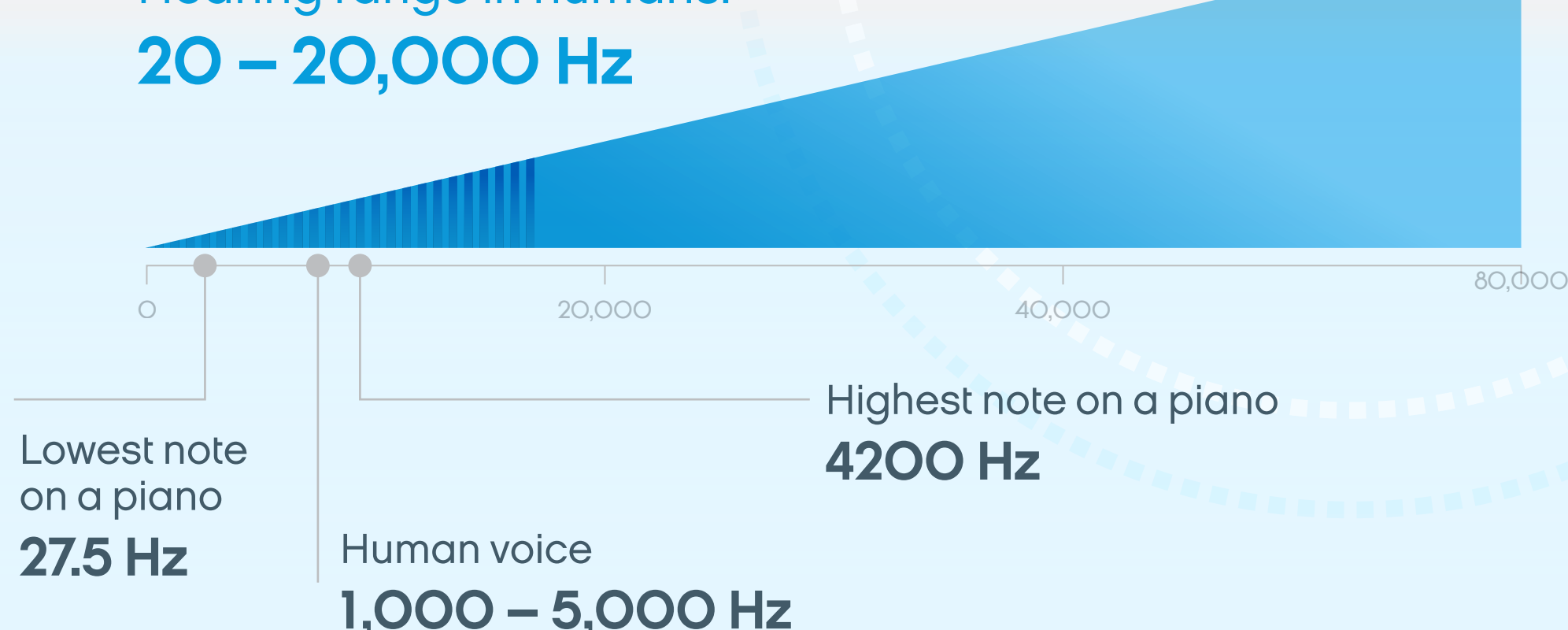


Humble Humans and Hertz

Sound waves, like ocean waves, can come quickly together or more slowly and far apart. The frequency of sound waves is measured in Hertz (Hz). The higher the Hz measurement, the higher in pitch we perceive the sound to be.

Hearing range in humans:

20 – 20,000 Hz



! We hear best at 1,000–5,000 Hz, the range of the human voice. People experiencing hearing loss often lose the upper range of these frequencies first.

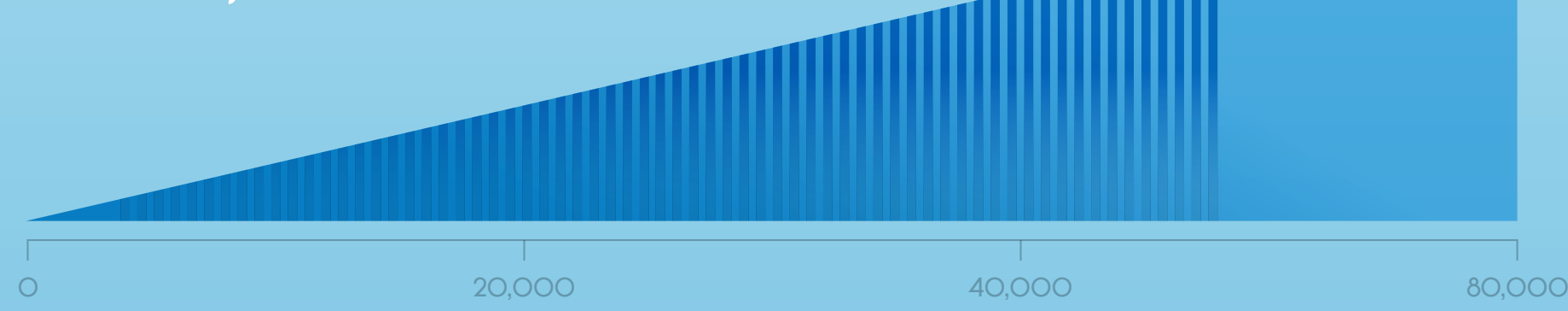


Speak, Fido, Speak!

Dogs have a much broader range of hearing than their human best friends. Those “silent whistles” used in dog training? They emit sounds too high for our hearing, but the frequency can call a canine, no problem.

Hearing range in dogs

40 – 60,000 Hz



What they hear

A **22,000 Hz** dog whistle will make a pooch perk up.

Puppies cannot hear until 21 days old. They rely on scent.

Dogs have 18 ear muscles to direct their ears to a sound.



What you hear

High-pitched bark = Greetings

Prolonged, frantic bark = Pain or distress

Deep bark = Warning

Very deep bark = Aggression and threat



A European pet food commercial features high-pitched audio only dogs can hear.

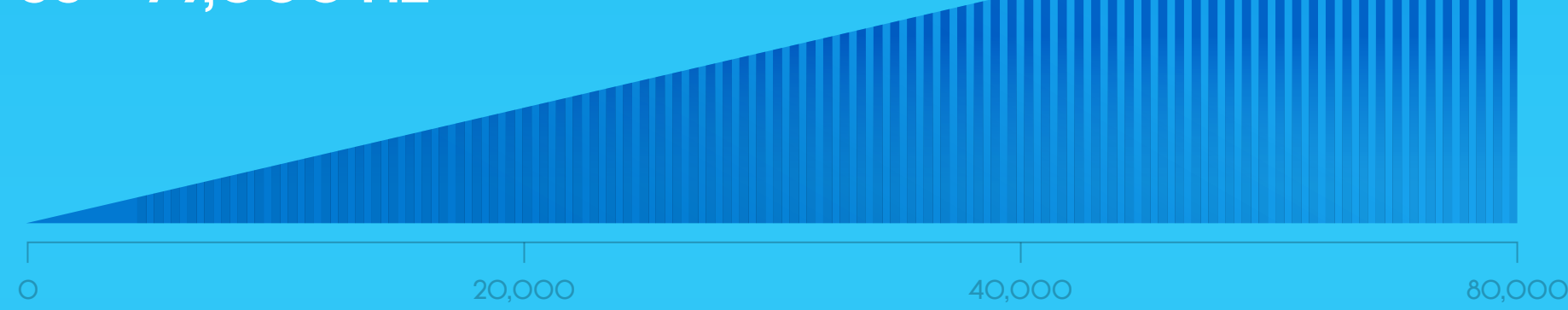


Hear, Kitty Kitty

A cat's hearing is extremely sensitive; it's among the best of any mammal. Cats can hear even higher-pitched sounds than dogs.

Hearing range in cats

55 – 79,000 Hz



What they hear

Cats don't hear very low sounds. (Is that why they ignore us?)

Cats can pick up—and pounce on—the 40,000 Hz calls of young mice.

Bad news: If you can hear a mouse squeak, you've got more than one. Humans only hear the lower, long-distance communications of these pesky pests.



What you hear

Chirping = Nearby prey

Chattering = Frustration

Hiss = Surprise

Purr = Pleasure and stress relief



! Cats may lower your blood pressure and stress. One study showed cat owners were 40% less likely to have a heart attack.



Super Songbirds

The range of many songbirds' hearing is similar to ours. It's their ability to process sound that sends them soaring above human capabilities. While we can process sounds about 1/20 of a second long, birds can discriminate sounds up to 1/200 of a second.

Hearing range in birds

50 – 12,000 Hz



What they hear

Birds have “perfect pitch.” They won't recognize their own note—or even just a few frequencies off.

Birds are very sensitive to tone and rhythm changes.

Pigeons have been able to distinguish between the music of Bach and Stravinsky.



What you hear

People often hear only a fraction of the total notes in bird songs.

Parrots aren't really “talking” back. Parrots, canaries, and other birds can repeat the harmonics they hear.



University of Chicago researchers believe birds replay and “rehearse” songs in their sleep. These dreams help them learn and improve song patterns.