

Purring tempo, sliding notes grab cats' attention

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Credit: Wikipedia

Is there such a thing as cat-centric music, which is pleasing music to cats' ears?

The journal *Applied Animal Behavioral Science* has published online a study by a team from the University of Wisconsin, Madison and University of Maryland. They worked to produce cat-centric music and tried it out on domestic [cats](#). "We looked at the natural vocalizations of cats and matched our music to the same frequency range, which is about an octave or more higher than human voices," lead author Charles Snowden said in *Discovery News*. "We incorporated tempos that we thought cats would find interesting—the tempo of [purring](#) in one piece and the tempo of suckling in another—and since cats use lots of sliding frequencies in their calls, the cat music had many more sliding notes than the human music." The journal carrying their study is the official journal of the International Society for Applied Ethology. Their research approach involved observations of 47 domestic cats hearing two types of music—one type relaxing classical music pleasing to humans (Gabriel Fauré's *Elegie* and Johann Sebastian Bach's *Air on a G String*) and the other type, specially created cat music.

What were the results? "While the relaxing classical music did not freak out the felines, they basically ignored it, showing no interest whatsoever," said *Discovery News*. The cat music grabbed their attention. "Cats possess scent glands along their tails, on each side of their head, between their front paws and on other parts of their body. When a cat rubs something or someone, prior research concludes this means the cat is claiming that thing or individual. In this case, the cats appeared to be trying to claim the music, represented by the speaker playing it," said *Discovery News*. "They did not rub against the speakers when the Bach and Fauré pieces were played."

Most of the cats in the study were mixed breeds; it was not possible to examine if certain [breeds](#) liked music more than others. Also, the researchers discovered that younger and older cats responded more to the feline-specific music than middle-aged cats.

Could the findings support useful applications? Cats experience stress in cat shelters. Their work may have relevance for shelter cats, especially those accustomed to human companionship. Snowden said in *Discovery News* that there was "some research showing that cats experience separation anxiety, which is greater in human-raised cats than in feral cats." The authors in their study wrote that "The results suggest novel and more appropriate ways for using music as auditory enrichment for nonhuman animals." Beyond cats, other animals have been explored for musical response, as researchers seek to learn more about responses to music by species other than human. Co-author of this cat study, David Teie, who is a musician and composer, has explored cognitive processes involved in music appreciation. Working with Snowden at the University of Wisconsin, they have studied "species-specific music" and looked at its effect on tamarin monkeys.

The website "Music for Cats" describes their work. They performed tests at the University of Wisconsin using response to human music as their experimental control. Included in observed behaviors were locomotion, vocalization, scent marking, female solicitation, foraging and speaker orientation. As for the tamarins, they showed a lack of interest in the human music. By contrast, the effect on them of the species-specific music composed by David Teie was reported as clear and convincing. "They displayed a marked increase of activity in response to the music that was designed to excite them, while the 'tamarin ballad' [music](#) induced a significant calming. This calming effect was measured against the [baseline](#) of silence; they moved and vocalized less and orientated more toward the audio speakers during and immediately following the playing of the tamarin ballad."

More information: [www.appliedanimalbehaviour.com ... \(15\)00060-X/abstract](http://www.appliedanimalbehaviour.com ... (15)00060-X/abstract)

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