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The felid purr: A healing mechanism?

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A current hypothesis suggests the purr indicates contentment, however, cats purr when they are severely injured or frightened. Forty-four felids were recorded including cheetahs, ocelots, pumas, domestic cats, and servals. A Sony TCD-D8 Digital Audio Recorder (DAT) and Statham Radio microphones recorded the purrs. FFTs and spectrographs were performed using National Instrument's Polynesia. An accelerometer was also used to measure domestic cat purrs. Every felid in the study generated strong frequencies between 25 and 150 Hz. Purr frequencies correspond to vibrational/electrical frequencies used in treatment for bone growth/fractures, pain, edema, muscle growth/strain, joint flexibility, dyspnea, and wounds. Domestic cats, servals, ocelots, and pumas produce fundamental, dominant, or strong frequencies at exactly 25 Hz and 50 Hz, the two low frequencies that best promote bone growth/fracture healing [Chen *et al.*, Zhong. Wai Ke Za Zhi. **32**, 217–219 (1994)]. These four species have a strong harmonic exactly at, or within 2 Hz of 100 Hz, a frequency used therapeutically for pain, edema, wounds, and dyspnea. An internal healing mechanism would be advantageous, increasing recovery time and keeping muscles and bone strong when sedentary. [Published with permission from the *New Zealand Veterinary Journal*; work supported by Endevco.]



topics

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