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**COVER** The bat *Pteronotus parnellii* detects, identifies, and catches flying insects by hearing variations in the echoes of the ultrasonic sounds that it emits. Auditory pathways to frontal cortex may play a role in this mammal's ability to use hearing as the chief sensory basis for spatial navigation. See page 824. [The photograph was taken in the laboratory of O. W. Henson, Jr., at the University of North Carolina, Chapel Hill, by Russell Hansen. The moth was tethered to a string for the purpose of the photograph]

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