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# Bats can learn from other species, in addition to their own

*Bats without borders: Predators learn novel prey cues from other predatory species*

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



**IMAGE:** THIS IS *LOPHOSTOMA SILVICOLUM* EATING A FOOD REWARD. [view more >](#)

CREDIT: KRISTA PATRIQUIN

Not only are bats capable of auditory-based social learning to identify a new food source from individuals in their own species, but they can also learn about new food sources just as quickly from members of a different species, a new study finds. These results suggest that bats may learn from different species in nature and offer further insights into the adaptive strategies and evolution of bats. Many bats roost and forage in mixed-species groups, yet previous studies that have examined social learning from members of a different species (or heterospecifics) resulted in inconclusive findings. Here, Krista J. Patriquin and colleagues found that the fringe-lipped bat (*Trachops cirrhosus*) could learn acoustic cues about unfamiliar prey from both members of the same species (or conspecifics) and heterospecifics (in this case the white-throated round-eared bat, *Lophostoma silvicolium*). Interestingly, the authors observed that one-third of the bats were able to learn about new prey on their own, though they did so more slowly than bats that learned from *L. silvicolium*. The authors also report that learning about new prey cues may be more difficult than learning new information about a previously familiar call, as *T. cirrhosus* took an average of three times longer to learn the novel cue compared to learning to respond to cane toad (*Rhinella marina*) mating calls (previous research shows that *T. cirrhosus* learned to associate such sounds with a food reward, despite the toads' large size). Patriquin et al. say that heterospecific social learning is often overlooked and warrants further study in communities where different species reside in the same environment.

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