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Bats in the News - Sexy Bats

Bats, it seems, tend to think about sex a lot – even when they're busy hunting insects or dodging obstacles in the dark. That, *Discovery News* reports, is the conclusion of a study by University of Ulm scientists who found that the echolocation calls bats use for navigation and foraging "also contain information about sex, which helps the flying mammals to acquire and keep mates."

The research results, published in the *Proceedings of the Royal Society B*, focused on greater sac-winged bats (*Saccopteryx bilineata*). Males of the species build harems of females, which are generally larger than the males, says *Discovery News*, the Discovery Channel website that covers science.

Mirjam Knärrnschild of the University of Ulm's Institute of Experimental Ecology and her team analyzed the echolocation calls of these bats. She told reporter Jennifer Viegas that the males "court females whenever the opportunity arises. The social information in echolocation calls about the sex of the calling bat [lets] males distinguish between females and male rivals. It might also benefit calling females because they are greeted friendly.'

Viegas writes that it had been assumed that the biosonar system called echolocation was used only for "seeing with sound." Now, she reports, "it's known that this very utilitarian system serves a dual function by facilitating courtship and social communication in general."

The echolocation calls for females are higher pitched and shorter than those of males. And when those recorded calls were broadcast to males, they "led to wooing with courtship vocalizations," *Discovery News* said. Male greater sac-winged bats responded to the calls of other males with aggressive vocalizations.

Knärrnschild told the website that male bats will also use an elaborate (and odorous) display to attract females. A male bat, Viegas reports, will "hover in front of the female and fan her vigorously, exposing her to a stinky perfume of sorts comprised of urine and glandular secretions kept in the wing sacs."

The researcher said she suspects that many bat species are capable of including social information in their echolocation calls.

Discovery News also notes that Knärrnschild and her colleagues discovered in an earlier study that baby bats often babble, mixing up echolocation calls with courting trills and other sounds.

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Greater sac-winged bats
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