

Blind as a ...?—Having apparently seen its target, a bat samples its reward.

CHIROPTOLOGY

Bats Aren't Blind as Bats

Just looking around, sugar-loving bats shoot down an old cliché

It is hardly accurate to describe someone who only picks at his food as "eating like a bird," since birds voraciously spend almost all of their waking hours in search of something to eat. "Quiet as a fish" became virtually meaningless with the discovery by oceanographers that undersea creatures actually make a wide variety of surprising noises.

Now another cliché has bitten the dust. Bats, heretofore occupying the pinnacle of the peak of creatures that one could be described as "blind as," can see after all!



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Two species of bats, both of which hover like hummingbirds while they eat, were taught at the University of Indiana to associate food—sugar water—with a target of a particular visual shape. The targets were silhouettes projected on an illuminated screen, so the bats' natural radar was no help.

One bat, normally fond of flower nectar, learned that the vials attached to round targets contained sugar water, while vials on rectangular targets held only quinine solution. He picked the right target 83 out of 89 times, then spotted 8 out of 8 round targets when both vials were filled with plain water to disqualify his sense of smell.

Of two fruit-eating bats tested with sugar-water- and quinine-water-laced melon balls, one scored almost 80 percent in picking a three-inch square from a circle of the same area. The other did even better at telling vertical and horizontal stripes apart.

Roderick A. Suthers, assistant professor of anatomy and physiology at the University of Indiana, Bloomington, aided in the project by graduate student Julia Chase, reported the bats' new outlook at a session of the American

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Association for the Advancement of Science meeting in Washington.

Though vision in bats varies from species to species, for the most part their eyes are poorly developed. This and their curious, built-in radar are both related to their largely nocturnal habits. An exception is the flying fox, a very large fruit bat not found in the U.S., but which has large, well-developed eyes.



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