

The phenomenon of **acoustic camouflage in moths** is an extraordinary evolutionary adaptation rarely discussed outside entomological circles. Certain moth species, such as the tiger moth, possess specialized organs called tymbals that emit ultrasonic clicks, effectively jamming the echolocation systems of predatory bats. This unique mechanism allows the moths to confuse or deter their attackers mid-flight, significantly increasing their survival rate. Interestingly, some moths take this a step further by synchronizing their ultrasonic signals with wingbeats to create "phantom echoes," masking their location entirely. This intricate interplay of biology and physics demonstrates how even the smallest creatures innovate for survival in the nocturnal arms race of predator and prey.