

## Study: Cat Walk Inefficient But Effective

**Evolution gave felines energy-wasting gait to help catch prey, Duke researchers say.**

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A cat's stalking gait is scientifically inefficient, but quite effective when it comes to catching prey. It turns out that a cat's graceful gait doesn't make for the most efficient way of walking, according to a recent study from a team of Duke University researchers. Unlike dogs, who rely on an energy-efficient style of four-footed running over long distances to catch prey, felines appear to have evolved a profoundly inefficient walk.

In a report published online in the research journal Public Library of Science (PLoS), the researchers followed up on a scientific hunch by videotaping the movements of six housecats in pursuit of treats or toys along a 6-yard-long runway.

Dogs and other long-distance chase predators can reduce their muscular work needed to move forward by as much as 70 percent, resulting in an energy-efficient running style. Cats, however, can limit physical exertion by no more than 37 percent, and it's lower than that in a stalking posture, according to the report.

"It is usually assumed that efficiency is what matters in evolution," said Daniel Schmitt, a Duke associate professor of evolutionary anthropology, in a news release. "We've found that's too simple a way of looking at evolution, because there are some animals that need to operate at high energy cost and low efficiency."

Cats, for instance, are better able to sneak up on a bird or mouse in slow motion. "If they're creeping, they're going to put this foot down, and then that foot down, and then that one, in an even fashion. We think it has to do with stability and caution," Schmitt said.