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Cat Tips

Your Cat's Quirky Habit Unveiled

Ever wondered why your cat does that funny little butt wiggle before leaping? It's not just for show! Delve into the science (or the lack thereof) behind one of the most curious and charming cat behaviors.

Analysis by <u>Dr. Karen Shaw Becker</u>

STORY AT-A-GLANCE

- Among the more puzzling behaviors cats display, the pre-pounce butt wiggle is one of the cutest
- There are many theories as to why kitties wiggle their backsides before pouncing on "prey"
- Felines have evolved as expert hunters, and just because a house cat no longer needs to hunt doesn't mean he's ready to give up an enjoyable, mentally stimulating behavior
- You can encourage your own kitty's natural hunting instincts by finding creative ways to have her "hunt" for food throughout the day

If you have a feline in the family, you may have noticed she's given to stalking all sorts of interesting things around your home, such as her toys, another pet in the household — even your bare feet. When she crouches low to the ground and swishes her hind end back and forth, she's preparing to pounce and capture her "prey." Clearly, the most mystifying move in the sequence is the butt wiggle!

The Feline Butt Wiggle Hasn't Been Scientifically Studied

What many cat parents don't realize is the adorable pre-pounce butt wiggle surely has a purpose in the world of felines. But as you might expect, there's a shortage of scientific research into the behavior.

"The short answer is science does not know; the butt-wiggling has not been studied, to my knowledge, in an experimental context," John Hutchinson, professor of evolutionary biomechanics at the Royal Veterinary College in London, told LiveScience.¹

Hutchinson theorizes butt-wiggling may help cats gain traction by pressing the hindlimbs into the ground before a

"It may also have a sensory role to prepare the vision, proprioception [an awareness of one's position and movement] and muscle — and whole cat — for the rapid neural commands needed for the pounce," he says.

It also may serve as an aerobic warm-up.

"It probably does stretch the muscles a bit and that might help with pouncing," says Hutchinson. "And we can't exclude that it's just fun for cats; they do it because they are excited by the thrill of the hunt [and] prey."

The behavior has also been observed in wild cats such as lions, tigers, and jaguars.

More Theories as to the 'Why' of Butt Wiggling

Veterinarian Hannah Hart, writing for PetMD, discusses additional potential reasons for the butt wiggle:²

• **Stability** — Cats move their back legs differently depending on whether they're walking or pouncing. When they walk, they alternate movement of their back legs to propel themselves forward. However, when they jump or pounce on prey, they push off the ground with both back legs simultaneously, which increases their power, speed, and distance.

Since the surface the cat is standing on must be able to support the movement of both back legs at the same time, kitty may be wiggling to test the sturdiness of the surface, ensure adequate traction, and maintain balance before pushing off the ground.

- **Preparation** It's possible butt wiggling is how cats warm up their muscles for the big, powerful, precision movements necessary for a successful pounce.
- **Mental stimulation** When cats engage in hunting behaviors, their brain releases dopamine that triggers feelings of excitement, motivation, and pleasure. Butt wiggling may simply be enjoyable for them, and it may also help them release any excess energy from the surge of dopamine.

While it seems butt wiggling is an instinctive behavior, it's likely kittens learn to hone this and other hunting skills by watching older cats, including their mother.

More Pre-Pounce Signals

Other **body language signals** that kitty's about to pounce include:

- Dilated pupils; a wide-eyed, unblinking stare
- Forward-pointing ears and whiskers
- Chattering or clicking
- Creeping in short, slow movements, with their body low to the ground and back legs tucked
- Tail twitching

Why House Cats Can't Give Up the Hunt

Unlike fully domesticated dogs, kitties are considered **semi-domesticated**, so it makes sense that many house cats retain some of the wilder aspects of their nature. They no longer need to hunt, but the drive is still there to some extent (which probably explains why they come alive and tend to be hungry at dawn and dusk).

Another very important factor influencing feline behavior is the unnatural and unstimulating existence of so many indoor cats. Most housecats today are bored silly, due primarily to their inability to participate in many of their natural behaviors like hunting.

Boredom would certainly explain why many kitties develop another little annoying habit — knocking things off counters, tables, and shelves.

"What many people do not realize," writes veterinary behaviorist Dr. Wailani Sung, "is that cats are curious and like to explore. They use their paws to help them explore by touching and manipulating objects that interest them. Sometimes they may push too hard, and items are moved. When objects fall and bounce around, your cat may be fascinated by the movement of the object.

For cats that are confined indoors, there is a lot of monotony and routine in their lives. Pushing objects around and making them fall down may give them more mental stimulation."³

How to Offer Your Cat Opportunities to 'Hunt' for Food

Lack of regular opportunities to hunt may also explain why many kitties with outdoor access bring home small dead or nearly dead critters and present them to their (often horrified) humans as gifts. Hunting is both mentally and physically stimulating for cats, which is why free-fed indoor kitties (who typically graze on kibble) tend to be bored and overweight or obese.

They behave like smaller versions of cows, who also graze all day. Grazing is very different from hunting, and while it's ideal for cows and other ruminants, it's entirely unnatural for felines, who are carnivorous hunters. Studies show that indoor cats thrive eating small, frequent meals throughout the day served in ways that require them to work to get the food.

My friend, fellow integrative veterinarian, and co-founder of our nonprofit, **CANWI** (Companion Animal Nutrition and Wellness Institute), Dr. Donna Raditic, has two cats at home and she's come up with a really creative way to feed her kitties.

"My homemade diet has the consistency of canned food with about 75% water, so it can't sit out at room temperature all day. I solved this problem by offering my cats their homemade diet first thing in the morning and when I return home.

I also placed some of the homemade food into an automatic feeder that has cold packs so I'm able to provide them two additional small homemade meals while I'm gone during the day. This means each day my beloved kitties get four small servings of my homemade diet."

Dr. Raditic also places three to four pieces of kibble in another automatic feeder that provides five more timed servings, plus she puts a few pieces in food puzzles that require her cats to spin, roll, poke, and paw at them to get the food out. Finally, she puts a few pieces in indoor hunting feeder mice and hides them around the house to provide the kitties with a new hunting experience every day.

"By using my homemade diet to provide the majority of the calories my cats eat each day," explains Dr. Raditic, "plus a small amount of a high-protein/very low-carbohydrate dry food in feeding toys, I can go to work knowing I'm providing them with an optimal diet while also satisfying their need to stalk and hunt." If you've successfully weaned your cats off kibble but still want to utilize these principles, you can use freeze-dried meats or food and accomplish the same goal.

Sources and References

¹ LiveScience, September 15, 2022

² PetMD, May 9, 2023

³ PetMD, December 5, 2018