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Canine Urination 101: Handstands and Leg Lifts Are Just the Basics

By Julie Hecht | October 18, 2013



As my [Twitter bio](#) says, I'm interested in your dog's urine. I'm not kidding around here. For a recent Animal Behavior class, I buddied up with a doggie daycare and followed dogs on their afternoon walks. Yes. I was that person walking around NYC with a hand held camera, trailing dogs and video taping them as they peed.

This wasn't a hypothesis testing experiment, I was simply trying to gauge what parts of urination were easily measured in a naturalistic context. I checked out things like urination duration, urine placement, leg position, leg height, tail position and post-pee scratching. If another dog was present, I got to see whether there was any over-marking (peeing on another dog's pee) or adjacent marking (peeing nearby). I was just measuring stuff as you often do when starting to investigate why animals do what they do.

I'm not the only researcher interested in your dog's urine. Patricia Yang and colleagues at The Georgia Institute of Technology have a similar interest in measuring things that might seem odd to measure. They've submitted the abstract [The Hydrodynamics of Urination: to drip or jet](#) to the Annual Fluid Dynamics Conference held by the American Physical Society in late November.

Using "high-speed videography" and "flow-rate measurement" they investigated independent urination styles, such as the dripping of small mammals and the "jetting" of large mammals. [New Scientist](#) interviewed Yang (and [Discover](#) has a piece out as well), and the coverage touches on urethra length, gravitational pull and the number of seconds it takes to empty bladders. I eagerly await how the published study links Newtonian physics to urine!

Truth be told, maybe I wanted to write this post so I could write "jetting" of large mammals, and show this video. Also, I want to go on vacation with these people*:



But as you've seen, urine does not begin and end with the jetting of large mammals. Dog urination is pretty awesome and a number of researchers are holding a figurative magnifying glass up to it (and you can too!). Some dogs let it all out at once — although, I'm pretty sure that's not called "jetting" — while others let a little out at a time. **And then of course, there's how they do it.**

A recent study by Wirant and McGuire (2004) found that female Jack Russell Terriers assumed a number of urination positions, including the squat-raise (most common), squat, arch-raise, combination and handstand. They found that females *"used the squat-raise and arch-raise postures more when off their home area than when on their home area."* If dog urination has a social function, it might make sense to present your urine in different ways depending on *where you are* and *who you are encountering*, don't you think?

Here's what you can do: When you're out walking your dog, pay attention to their urine. Do they assume a different position if you take them to an area where they've never been or go infrequently? Or do they pull out the same tricks no matter where they are?

I want you to leave your urine reports below, and share early and often. My business is urine, and it can be yours too.

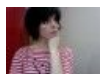
* What do you think? Better video title: 1) Wow, What a Pee, 2) Don't Brag on Camera or 3) Did You Have a Good Pee, Mr. Rhino?

Photo: Flickr Nature's Fire Hydrant via Mike Finkelstein Creative Commons

References

Wirant & McGuire. 2004. [Urinary behavior of female domestic dogs \(Canis familiaris\): influence of reproductive status, location, and age](#). *Applied Animal Behaviour Science* 85, 335-348.

Pham et al. 2013. [The Hydrodynamics of Urination: to drip or jet](#). *Bulletin of the American Physical Society*. 66th Annual Meeting of the APS Division of Fluid Dynamics. Volume 58, Number 18. November 24–26, 2013; Pittsburgh, Pennsylvania



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