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New Golden Rule: Every Mammal Takes 21 Seconds To Urinate, Scientists Discover

Scientists have discovered a new golden rule that's literally, well, golden: every mammal takes about 21 seconds to urinate.

Researchers at the Georgia Institute of Technology have dubbed the rule the "Law of Orientation."

Regardless of the size of the animal, it takes about twenty-one seconds to pee, they found.

Patricia Yang and her co-authors discovered this rule after observing animals at the Atlanta Zoo. To conduct the study, they filmed cows, dogs, elephants, goats, and rats, taking into account their size, bladder pressure, and urethra length, and compiling the data along with videos of other peeing animals culled from YouTube.

The scientists constructed mathematical models from the data and found that every animal took an average of 21 seconds to relieve itself, despite bladders that varied in volume from 100 milliliters to 100 liters. The video below explains their findings below.

Yang says that prior to this study, most urination models focused on bladder pressure and used relatively small mammals, not taking gravity into account.

As reported by The Verge, an elephant's long urethra "gives its urine more time to pick up speed. Because of this, the animal can empty its enormous bladder in about the same time as goats, dogs, and other medium-sized mammals. For small mammals like rats and bats, gravity doesn't exert much influence on flow rates, which are instead determined by viscosity and surface tension. That's why they urinate in small drops, Yang says, finishing the job in less than a second."

The researchers will present their new findings next month at the American Physical Society Division of Fluid Dynamics meeting.

What do you think of this? Are you amused, surprised, grossed out, or all of the above? Watch the video below and let us know!

