Dog and Cat Populations Are Approaching Human Numbers – Where Are the Pooch and Kitty Loos?

One hundred seventy-nine million dogs and cats live in the U.S. That's more than the number of people who called this place home in 1959. Back in the days of doo-wop, pets roamed free and did their business wherever. Outdoor cats buried their droppings discretely; we never saw it. Nobody cleaned up after dogs. Our job was to not step in it.

Fast forward to 2015. The U.S. pet population has grown to nearly half the human population, the highest concentration of pets in the world. Urban dogs and cats are no longer free range. We're now expected to clean up after our pets, a process expedited by biodegradable poop bags, fragrant clay litter, and kitty bum wipes.

Yes, we've commodified pet care big time. The American Pet Products Association estimates that we'll spend $60.59 billion on our pets in 2015. But we do a disservice to our pets – lights of our lives, best friends, playmates and family members – as long as we deny our responsibility as their environmental stewards. Much has been written about our pets' conspicuous consumption and carbon paw prints. But we overlook what's in plain sight: the simple fact that we have no sensible, sustainable infrastructure in place for disposing of pet waste.

There's no way around it; the rascals generate mounds of poo. Our 83 million dogs produce 11 million tons of waste each year—enough to fill more than 100 football fields 10 feet deep. Our 93 million cats download five million tons (500,000

dump trucks full) of poop and litter per year.

Sixty percent of dog waste and most cat waste is bundled in plastic and trashed: streamed to sealed local landfills where it takes generations to degrade while emitting methane, a powerful greenhouse gas. The plastic wrap is a forever gift to the universe. As for the 40% of dog waste left at ground zero, don't kid yourself, poo is potent stuff.

For a small bay watershed (up to 20 square miles), two to three days of droppings from a population of 100 dogs contribute enough bacteria, nitrogen, and phosphorus to temporarily close a bay to swimming. Dog poop left along trails or walkways threatens native plants while spoiling urban landscapes. And it's still your job to not step in it.

Eco-minded pet removal services, dog day cares, shelters, dog park managers, and vets search for alternatives to dumpsters. No one but trash haulers will take pet waste. Food scrap and yard waste recycling programs list pet waste on the "no" side of acceptable refuse. Water treatment plants won't process large offerings of pet poo. Biodigesters and other trash-to-energy operations are scarce in the U.S.

The EPA says "go for it" – go ahead and flush that dog doo down the toilet. Not real convenient or appealing, right? The feds leave pet waste disposal to the states, which often delegate responsibility to local jurisdictions ("You take it…no, you take it"). Some districts offer residents rebates to purchase pet waste composting systems or sponsor pet waste recycling classes. Most say trashing is the only option, cautioning pet owners to "double bag it."

Ah – but don't we have bigger dogs in the race to zero waste? Aren't our huge quantities of food scraps and yard waste a bigger priority? According to the EPA's "Advancing Sustainable Materials Management: 2013 Fact Sheet," food accounts for 14.6% of residential waste and has a paltry 2.1%

recovery rate. We have a better handle on recycling yard trimmings, which make up 13.5% of refuse but have a 23.6% recovery rate thanks to longstanding municipal collections and traditional composters.

A 2006 San Francisco analysis found that pet poop comprised nearly 4% of residential waste. This might be a conservative figure since trash from pet business and parks wasn't part of the tally. Why should we be concerned with 4% of the pie chart when food and yard waste add up to 28%?

For one thing, carnivore waste, like raw human waste, involves serious sanitation and pollution issues. Collecting and recovering organics containing harmful pathogens require due diligence, systematic treatment and testing. Most organics recycling facilities aren't technologically or financially equipped to accommodate potentially hazardous source material.

But, when it comes to long-range planning, let's be practical. While we're developing systems to efficiently boost food and yard waste recycling, shouldn't we be combining pet waste and disposable diaper recovery with these two other source materials? Shouldn't we be thinking our way around comingled pet waste, plastic bags, and clay litter at the product source?

The average dog poops more per day than the average person. The average cat produces somewhat less waste but also generates an indeterminate amount of trashed litter. Throw in the tons of plastic we use in a foolhardy attempt to sanitize this absurd process.

Add it up and you find that U.S. pets in 2015 generate roughly the same amount of solid waste as the U.S. human population in 1959. Can you imagine an advanced country in 1959 not providing a practical sanitary disposal system that works for its 178 million people? I have a hard time wrapping my head around that one and hope you do, too.

Pet Poop Facts

Human population in 1959: 177,829,628 – U.S. Census Bureau

Current pet population: 83 million dogs, 96 million cats in the U.S., total 179 million – U.S. Humane Society

Pet population concentrations

Top Ten Countries With Most Pet Dog Population
Top Ten Countries With Most Pet Cat Population

Pet products spending

Pet Industry Market Size & Ownership Statistics

Pet waste quantities

- Average dog produces .75 lbs. of waste per day (U.S. Dept. of Agriculture)
- Average cat produces .3 lbs. of waste per day (no data, based on author verification)
- Dog waste weighs average of 35 lbs. per sq. ft. (no data, based on weight provided by Sam Johnson, owner, Pet Scoop, Denver, Colorado)
- Assumption: cat waste and dog waste have similar weight

Football field math / dogs

- 83M dogs x .75 = 62,250,000 lbs. per day or 22,721,250,000 lbs. per year or 11,360,625 tons per year or around 11.4 M tons of dog waste per year
- 1 football field = 57,600 sq. ft. (includes end zones) dogs produce 22,721,250,000 lbs. waste per year
- 1 cu. ft. of dog waste = 35 lbs. 22,721,250,000 lbs. divided by 35 lbs. = 649,178,571.429 cu. ft. 649,178,571.429 cu. ft. covers 64,917,857.1429 sq. ft. and is 1 ft. deep 64,917,857.1429 sq. ft.

divided by 57,600 sq. ft. = 1,127.04613095 football fields 1 ft. deep or 112.704613095 football fields 10 ft. deep

Dump truck math / cats

- 96M cats X .3 = 28,800,000 lbs. per day or 10,368,000,000 lbs. per year or 5,184,000 tons per year or 5.2M tons of cat waste per year. 5,200,000 tons divided by 500,000 = 10.4 tons, average dump truck capacity

Dog waste water pollution

"For a small bay watershed (up to 20 square miles), 2 to 3 days of droppings from a population of 100 dogs contribute enough bacteria, nitrogen, and phosphorus to temporarily close a bay to swimming and shellfishing." Pollution Prevention Management Measure

Human waste quantities

On average humans excrete 128 g (.28 lb.) of fresh feces per person per day – Rose, C.; Parker, A.; Jefferson, B.; Cartmell, E. (2015). "The Characterization of Feces and Urine: A Review of the Literature to Inform Advanced Treatment Technology". *Critical Reviews in Environmental Science and Technology* **45** (17): 1827–1879.doi:10.1080/10643389.2014.1000761. ISSN 1064-3389.

(.28 lbs. vs. .75 ave. dog)

But that's an educated guess. Because, as it turns out, there are no definitive figures. In his book Nanomedicine, Dr. Robert A. Freitas Jr. cites three studies in putting his daily figure at 100-200 grams – that is, .22 to .44 pounds a day. A 1992 study in Gastroenterology found an average of 106 grams a day among 220 UK residents, but with the caveat that "data

from other populations of the world show average stool weight to vary from 72 to 470 g/day.” The Merck Manual says that Westerners grunt out 100-300 grams a day (.22 – . 66 or .44 lb.). See more

Further reading:

- *The Pet Poo Pocket Guide: How to Safely Compost and Recycle Pet Waste*, Rose Seemann, New Society Publishers