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# A Look at Pet Ownership Numbers with the Stats Cat

Stats Cat - 21 September, 2012



My name is Marlowe, and I'm a cat. A cat who tries to make the best decisions based on data and statistics, and wants to help you do the same thing. Hey, if I can use data to better understand my world, so can you.



I permit several people to live with me. They're all okay, but my favorite houseperson is that one who studies statistics. He taught me about this data analysis stuff. Oh, he didn't know he was doing it—he was just reading textbooks aloud and talking to himself while doing his assignments. But cats have the best ears on the planet, and it didn't take long before I figured out what he was talking about. In fact, not to brag, but it didn't take long before I was better at statistics than him.

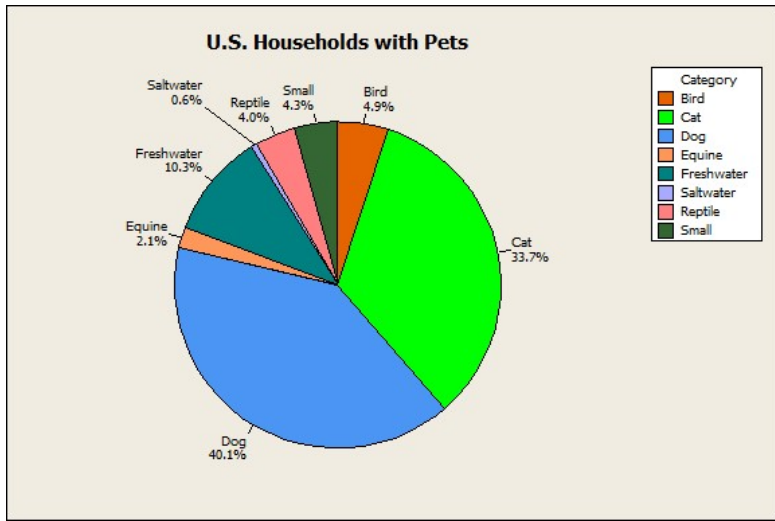
We cats are like that. Naturally superior, I mean. To humans, for starters—but especially to dogs.

That's why I'm so happy about the American Pet Products Association's 2011-2012 National Pet Owners Survey. There's a lot of good news for cats there, and it's a prime example of how sometimes simply throwing data into a visual format like a pie or bar chart can tell you a lot more than just the numbers do.

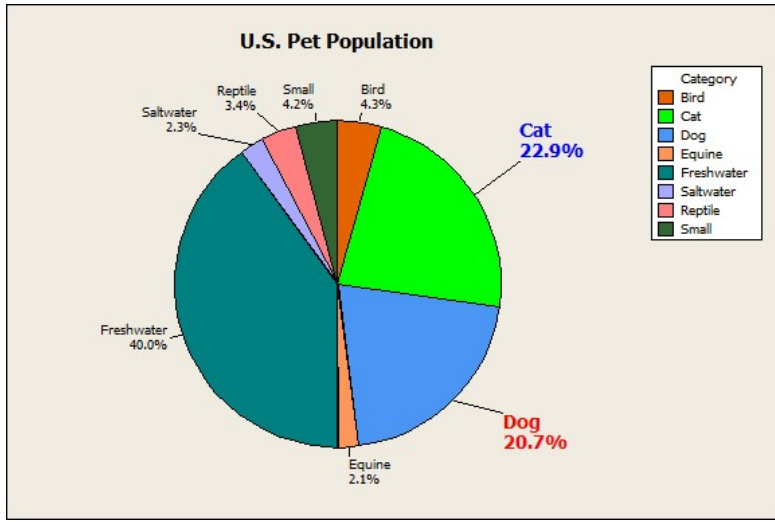
I was gratified to see that the number of households in the U.S. that pets shared with people rose from 56% in 2008 to 62% in APPA's most recent survey. The dark side of that increase is that not all of those are cat households. Stop mewling; we must accept that people also like fish, birds, reptiles, horses...even dogs. But I was concerned enough to dig deeper into the numbers with Minitab Statistical Software to see what else I could learn about pet ownership in the U.S. And what it means for us cats. If you want to make some explorations of your own, grab my datasheet [here](#).

One of the first things I learned about data is that it's easier to see what it means when it's graphed than when it's just a bunch of numbers. So I began by creating simple bar and pie charts in Minitab. It's easy; just go to **Graph > Pie Chart**, and select a categorical variable (like, "type of pet") and a summary variable (like the numbers of each type).

I don't need to tell you how dismayed I was when I looked at the chart for the number of households that own different kinds of pets:



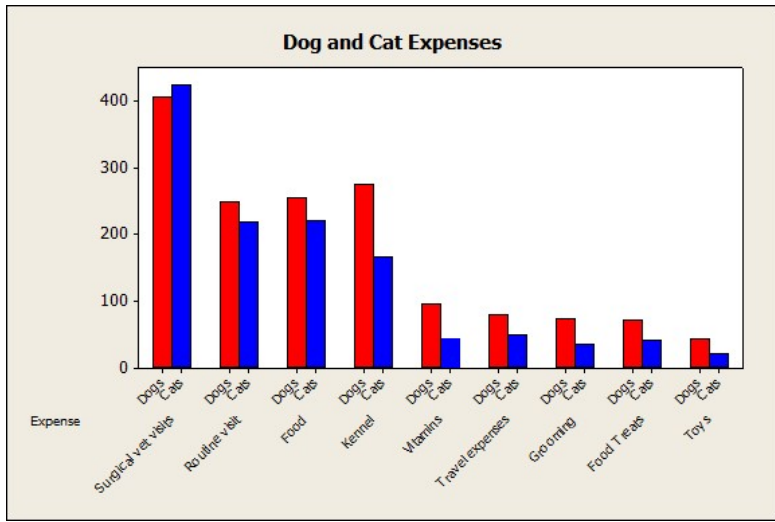
As the graph clearly shows, 40.1 percent of households that pets share with people include dogs. Compared to a mere 33.7 percent with cats. Depressing, I know. But before we succumb to despair, let's look at the pie chart for overall pet populations in the U.S.



You see that, right? Cats make up 22.9 percent of the pet population, compared to a mere 20.7 percent for dogs. Hah! In your face, dogs!

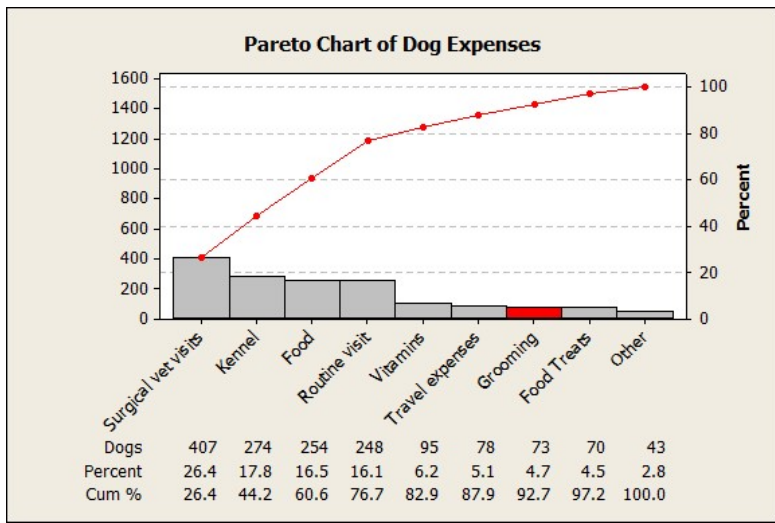
Now, you may notice that cats are not the overall leaders in population; freshwater fish top us with 40 percent. However, can't we agree that this is simply a design flaw in this survey? Freshwater fish should not be classified as "pets"—they're more accurately thought of as kitty treats.

Speaking of which, the APPA survey also looked at the relative expenses of cat and dog ownership. Once again, we see some great news for cats here. But instead of using a pie chart this time, we can see the results more clearly with a bar chart that displays average cat and dog expenses side by side. Dog expenses are shown in red, cat expenses in blue:



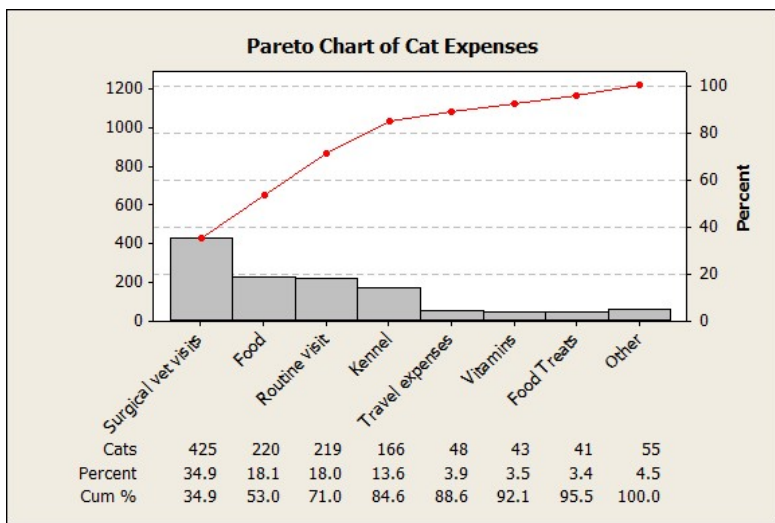
As you can see, more dollars are spent on cat surgery than on dog surgery. That makes sense, because dogs are relatively simple, whereas cats are mysterious and complicated and therefore require a higher degree of surgical know-how. But you'll notice that red expenses exceed blue expenses for every other item on the list. Maybe dog-lovers appreciate that simplicity, but they pay for it!

I'll leave you with one further insight I gleaned from the APPA survey data. This time I took the expenses data and made Pareto charts for both cats and dogs. The results point to another area where cats have it all over dogs. Here's the dog expense Pareto:



Take a careful note of the item that appears in red there. (It's true that cats have magnificent eyesight, so if you can't make it out, that red bar represents average annual dog owner expenditures for "Grooming." Ouch.)

Now, here's the cat expense Pareto chart:



Hmmm. Notice anything missing there? That's right, grooming. Average expenditures on grooming your cat don't even merit a column of their own on this Pareto chart, and that ought to tell you something about dogs and cats. It may be true that a lot of cats are raised in a barn, but at least we know how to clean ourselves.

As you can see, once you put the numbers into a graphical form, it's much easier to understand what they're telling you.

I believe these data meow for themselves.

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