

Why do animals yawn? Why do cats eat grass? and more from AAHA

These and other pressing questions were explored in an entertaining animal behavior session at the AVMA's annual convention in Atlanta, Ga., in 2010.

Benjamin Hart, DVM, PhD, DACVB, distinguished professor emeritus at the University of California –Davis, spoke about some of the more inexplicable behaviors of companion animals in his talk: “Why do they do that? Purring, yawning, flipping out on catnip, and eating poop.”

Why do cats eat grass?

Hart cited statistics that said about 80 percent of cats eat plants of some kind or another. Grass-eating is common in wild felids such as lions, and dogs eat grass, too. But the reasons for this behavior are not well-understood. It is commonly thought that grass eating in cats and dogs is linked to intestinal distress. However, in a Web-based study of more than 2,500 cat owners, Hart said only 5 percent of plant-eating cats showed signs of illness, although 32 percent vomited after eating. About half of the cats in the survey ate mostly grass.

The results were much different for younger cats (less than one year old). Among these cats, only 1-2 percent showed signs of illness and on 2 percent vomited after eating grass or plants. Also, about 80 percent of young cats ate plants other than grass.

Hart concluded that grass-eating among cats is normal, and may have some ongoing health-related effects such as expulsion of intestinal worms. However, a sudden increase in grass-eating behavior could signal intestinal distress, he said, so the behavior should be monitored.

Why do cats purr?

The sound of a purring cat is music to many cat owners' ears. But the fact is that no one really knows why this behavior occurs. It is known that purring occurs in species where the hyoid process is fully ossified, such as cats, cheetahs, jaguars, and bobcats. Lions and tigers and other roaring species cannot purr, and purring species cannot roar. Roaring and purring probably serve different evolutionary purposes, Hart said.

Cats purr when they seem to be happy, but also when they are sick, injured or even giving birth. Some of the latest theories say that purring is a way to repair muscles and tendons after a vigorous chase. Hart cited research that said purring occurs in the range of 25 Hz, which is identical to the frequency that promotes healing of wounds and tissue. A sick cat that purrs is also helped in this way. Inactive cats who lie around on the couch all day may also purr in order to keep up their muscle mass.

Why do animals yawn?

Hart said that while the common belief is that yawning expands the lungs and oxygenates the brain, many animals yawn without low oxygen levels.

The current, leading hypothesis is that yawning cools the brain, Hart said. During inactivity, cerebral circulation slows and the brain warms up. Yawning cools arterial blood via the nasal countercurrent veins, and thus cools off the brain, allowing it to function better.

“Imagine sitting around the campfire with predators around,” Hart said. “You see some bushes moving, yawn, the brain cools and you are ready for action.”

The contagious nature of yawning could also be explained with this theory. If one member of a group yawns, it signals the others that action is imminent so the others need to cool their brains as well. A

recent study found that yawns are contagious between humans and dogs. Hart speculates that co-evolution between dog and man has led to this phenomenon.

Why do cats flip out on catnip?

Most cats, when exposed to catnip, will go through a series of random reactions including courtship, predatory and play behaviors for 5-15 minutes. Hart said that this reaction does not seem to be a marijuana-like reaction since it does not require any blood levels of the ingredient to provoke a reaction. It is also not any kind of co-evolutionary phenomenon, since the catnip plant evolved on a different continent from cats. He said it seems to be “just an odd event.”

However, Hart did offer one theory. The active ingredient in catnip, nepetalactone, appears to activate the neural elements of play, aggression, sexual behavior and predation in the cat’s brain. The skin of stressed mice produces lactones, and these secretions might be similar enough in some cases to provoke the catnip-like reaction in the cat that has caught it, allowing the mouse a chance to escape.

Poop eating

Hart said he saved this subject for last in his presentation “because it’s so disgusting.” Coprophagia has grossed out and confounded many pet owners and veterinarians for a long time. Unfortunately, there does not seem to be an effective way to stop dogs from eating their poop, although he did offer some interesting stats on dogs that do it.

Hart cited a recent unpublished Web-based study, which included information from nearly 1,500 pet owners with dogs that had been seen eating feces daily or weekly, and at least 10 times. According to the survey, the top five feces-eating dogs were Labrador retriever (10.4 percent); golden retriever (5.8 percent); Basset hound (5.5 percent); German shepherd (5.3 percent); and the Shetland sheepdog (4.7 percent).

About 10 percent of the dogs ate only their own stool, while 32 percent ate the stools of others, and nearly 50 percent of all dogs who ate feces would eat their own or that of other dogs. “Most dogs ate any ol’ stool,” Hart said.

Other findings included:

- Females were more likely than males to engage in this behavior (60 percent vs. 40 percent)
- The behavior does not reflect poor den sanitation: 82 percent of dogs in the survey almost never soiled their own house
- Almost all dogs opted for fresh stools as opposed to old ones
- Neither behavior modification techniques nor food additives seemed to be effective in changing the behavior