## Global warming could be causing a kitten boom, experts say

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WASHINGTON - Global warming and kittens. While it may seem hard to see the connection between the two - a climate phenomenon that melts glaciers and acidifies oceans, and cuddly, 4-ounce balls of fur - experts say there could be one.

Each spring, the onset of warm weather and longer days drives female cats into heat, resulting in a few months of booming kitten populations known as "kitten season."

"The brain receives instructions to produce a hormone that basically initiates the heat cycle in a cat," said Nancy Peterson, feral cat program manager of the Humane Society of the United States, "and those instructions are affected by the length of day and usually the rising temperatures of spring."

Peterson said kitten season generally starts in March or April, as the days get warmer and longer, and the flood of kittens continues throughout the spring and early summer.

What shelter officials and veterinarians have begun noticing, however, is that kitten season is starting to begin earlier and last longer.

"They're mating earlier and we're starting to see them coming into the shelters much earlier in the season," Washington Humane Society Shelter Director Michelle Otis said.

In February 2007, for instance, the Philadelphia Animal Welfare Society recorded a total cat intake of 672. The intake in February climbed to 1,008.

"Right now we're getting absolutely flooded with kittens," said Rory Uhler, president of the Safe Haven Animal Sanctuary in Cincinnati, noting that kitten season usually tapers off in the third or fourth week of June.

Newspaper ads and signs on street corners advertising "free kittens" are popping up all around Cincinnati, where kitten season started a month early this year, Uhler said.

"I don't know any shelter that has any room in Cincinnati," he added.

Where does global warming fit in? Some experts say rising temperatures could be lengthening kitten season by altering cat reproductive cycles.

"It might make sense that if temperatures are rising, cats will go into heat more often," Peterson said.

On its Web site, the Environmental Protection Agency states that rising temperatures may cause some small mammals to start breeding earlier in the year.

"Domestic cats evolved from African ancestors," said Julie Levy, a veterinarian and shelter medicine professor at the University of Florida. "Although they have adapted to climates throughout the world, it is possible that global warming is mimicking their ancient origins and helping them reach their full reproductive potential."

Other experts disagree, holding that the heat cycle in cats is based on day length and light exposure, not temperature.

"A cat's cycle is based on day length, and day length isn't changing," said Christine Petersen, assistant professor at Iowa State University's College of Veterinary Medicine. "Temperature's going up a little, but the sexual cycle of the cat isn't based on temperature."

Even if rising temperatures are not directly influencing cats' heat cycles, they can play a role in other ways. Some experts believe, for instance, that milder weather increases kitten survival rates.

And Levy offered another theory - that warming could hasten the onset of puberty in cats, as it does in some other species, creating a larger pool of fertile cats each breeding season.

Yet another explanation could be a "food chain effect," in which warm weather may help more rats and mice survive, providing feral and stray cats with more prey and allowing their numbers to thrive, said Gail Buchwald, vice president of the American Society for the Prevention of Cruelty to Animals Adoption Center in New York.

Whatever the cause, the cat population crisis is hitting animal shelters hard, and in many cases, may result in higher euthanasia rates.

The Humane Society of the United States estimates that half of the 6 million to 8 million dogs and cats that enter U.S. shelters every year are euthanized.

"There just is not enough space, and there just aren't enough homes for all the cats and kittens being born right now," Otis said.

Theoretically, one cat that mates three times a year - cat pregnancies last 63 days and produce four to six kittens - and her offspring could produce 420,000 kittens over seven years, according to the Humane Society of the U.S.

Experts agree that the most critical factor in decreasing the cat population is sterilization through spaying or neutering.

Many veterinary clinics and animal shelters offer discount spay and neuter rates for pet owners, and many also operate programs that trap, neuter and release feral cats

"We were part of the problem," Buchwald said. "We need to be part of the solution."