



# Quarterly Meowsletter

Garden City Cat Hospital 332 Geneva Street (905) 646-8800

Spring 2006

**?** **Ask the vet.**  
**Chitchat** with Dr. Jeremy Chivers.

## Ditch the **ITCH!** It's Flea Season...Here's What You Need to Know.

### Fleas seem to be rather simple creatures. How complicated can their life cycle be?

Although you are only able to see the adult flea, there are actually four stages of the life cycle. The adult flea constitutes only about 5% of the entire flea population if you take into account all four stages of the life cycle. Flea eggs are pearly white and about 1/32" (1/2 mm) in length. They are too small to see without magnification. Fleas lay their eggs on the cat, but the eggs do not stick to the cat's hair. Instead, they fall off into the cat's environment. The eggs make up 50% of the flea population. They hatch into larvae in 1 to 10 days, depending on temperature and humidity; high humidity and temperature favor rapid hatching.

Flea larvae are slender and about 1/8 - 1/4" (2 to 5 mm) in length. They feed on organic debris found in their environment and on adult flea feces, which is essential for successful development. They avoid direct sunlight and actively move deep into carpet fibers or under organic debris (grass, branches, leaves, or soil.) They live for 5 to 11 days before becoming a pupae.

Moisture is essential for their survival; flea larvae are killed by drying. Therefore, it is unlikely that they survive outdoors in shade-free areas. Outdoor larval development occurs only where the ground is shaded and moist and where flea-infested pets spend a significant amount of time. This allows flea feces to be deposited in the environment. In an indoor environment, larvae survive best in the protected environment of carpet or in cracks between hardwood floors. They also thrive in humid climates.

Following complete development, the mature larvae produce a silk-like cocoon in which the next step of development, the pupa, resides. The cocoon is sticky, so it quickly becomes coated with debris from the environment. This serves to camouflage it. In warm, humid conditions, pupae become adult fleas in 5-10 days. However, the adults do not emerge from the cocoon unless stimulated by physical pressure, carbon dioxide, or heat.

Pre-emerged adult fleas can survive up to 140 days within the cocoon. During this time, they are resistant to insecticides applied to their environment. Because of this, adult fleas may continue to emerge into the environment for up to 3 weeks following insecticide application.

When the adult flea emerges from its cocoon, it immediately seeks a host because it must have a blood meal within a few days to survive. It is attracted to people and pets by body heat, movement, and exhaled carbon dioxide. It seeks light, which means that it migrates to the surface of the carpet so that it can encounter a passing host. Following the first blood meal, female fleas begin egg production within 36 to 48 hours. Egg production can continue for as long as 100 days, which means that a single flea can produce thousands of eggs. This entire life cycle (adult flea - egg - larvae - pupa - adult) can be completed in 14-21 days with the proper temperature and humidity conditions. This adds to the problem of flea control.

### What can these fleas do to my cat?

If untreated, the female flea will continue to take blood for several weeks. During that time, she will consume about 15 times her bodyweight in blood. Although the male fleas do not take as much blood, they, too, contribute to significant blood loss. This can lead to the cat having an insufficient number of red blood cells, which is known as anemia. In young or debilitated cats, the anemia may be severe enough to cause death.

Contrary to popular belief, most cats have rather limited itching due to flea bites. However, many cats become allergic to the saliva in the flea's mouth. When these cats are bitten, intense itching occurs, causing the cat to scratch and chew on its skin.

### What can I do to rid my cat of fleas?

Successful flea control must rid the cat of fleas and it must rid the cat's environment of fleas. Medications such as Revolution™ and Advantage™ treat both the cat and the environment. If your cat remains indoors and you do not have other pets that come in from the outside, environmental control is relatively easy. However, the cat that goes outdoors or stays outdoors presents a significant challenge. You will need to use one of the prescription-strength medications available at the veterinary hospital.

Continued on back...



**Garden City Cat Hospital - A Place Especially for Cats and Their People!**

## Continuation of front page story.

### What can I do to my cat?

The latest products in the war on fleas are used once each month. Revolution™, Advantage™ and Program™ are monthly products that are applied to your cat's skin. They are purchased in small vials that contain one dose. They kill adult fleas, usually before the flea has the opportunity to bite your cat.

To truly win the war on fleas, you need to use one of the above-mentioned veterinary-quality medicines. Store-bought insecticides that are applied to the cat have limited effectiveness against fleas because they are only effective for a few hours after application. Also, these are primarily geared to kill adult fleas. Flea powders, sprays, and shampoos will kill the fleas present on your cat at the time of application. However, most of these products have little or no residual effects, so the fleas that return to your cat from his environment are not affected. Thus, your cat may be covered with fleas within a day after having a flea bath or being sprayed or powdered.

### I have not seen fleas on my cat. Does that mean that none are present?

When a cat is heavily infested with fleas, it is easy to find them. If the numbers are small, it is best to quickly turn your cat over and look on its belly. If you do not find them there, look on the back just in front of the tail. Be sure to part the hair and look at the level of the skin. When the numbers are very small, look for "flea dirt." Flea dirt is digested blood left behind by the fleas. Flea dirt is actually fecal matter from the flea. Finding flea dirt is a sure indication that fleas are present or have been present recently.

Flea dirt looks like pepper. It varies from tiny black dots to tubular structures about 1/32" (1/2 mm) long. If you are in doubt of its identification, put the suspected material on a light colored table top or counter top. Add one or two drops of water, and wait about 30 seconds. If it is flea dirt, the water will turn reddish brown as the blood residue goes into solution. Another trick is to put some of the material on a white paper towel and then wet the paper towel with water. A red stain will become apparent if you gently wipe the material across the surface of the paper towel.

Many people find tiny drops of blood in a cat's bedding or where the cat sleeps. This is usually flea dirt that was moistened, then dried. It leaves a reddish stain on the bedding material and is another sign that fleas are present.

### I just got my cat home from boarding and it has fleas. Doesn't that mean that it got them at the boarding facility?

Not necessarily. If you recall, pre-emerged adult fleas can survive up to 140 days within the cocoon. This is significant when your pets are gone from home for extended periods of time. During the time that the house is quiet and empty, pre-emerged adults remain in their cocoon. Even if the house was treated with an insecticide, their cocoon protects them. When people and pets return to the house, adults emerge from their cocoons and immediately begin to seek a blood meal. They jump on cats, dogs, and even people. Although it may appear that a cat just returned from boarding brought fleas to your home, it is also very possible that a sudden emergence of adult fleas may account for the fleas present.

## Spending time away? Treat your cat to a vacation too.

## Check out the Garden City Cat Hospital's "Cat Country Club"!

Let us make your travel plans a little easier by taking care of your special feline while you're gone. In fact, time spent at our "Cat Country Club" is indeed a treat for any feline. Boarders are welcome for a day, a month or longer. Call us to book your feline's vacation. Here are just some of the things we offer at our *purr-fect* little Bed & Breakfast:

Pure, reverse osmosis water  
Quiet, dog-free environment  
Climate-controlled environment  
Soft, plush lamb mats  
HEPA air filters

High-quality veterinary diets and treats available  
Daily monitoring by Dr. Chivers and veterinary staff  
Whole suites (not shared) with a window view  
Heated "Snuggables" for 12-hour overnight warmth  
Exercise room with audio/visual stimulation

Daily playtime and exercise  
Feline Play-zone  
Medical boarding  
Nail trim and comb-out  
Nature scenes

### Price List

Regular Boarding	\$18.30/night + GST
Luxury Suite (entire room with window view)	\$32.50/night + GST*
Medical Boarding	add \$13.00/night + GST

\*Note: Luxury suite price includes 1-3 cats. More than 3 cats, please add \$5.40 per cat.

### Ask about our discounts for long stays!

**Interested in a tour?** Just give us a call at your convenience, and we'll gladly arrange for you to take a tour of our boarding facilities.

Sweet dreams at  
Garden City  
Cat Hospital



**Garden City Cat Hospital - 332 Geneva Street - (905) 646-8800**