

## **Facts about Fleas**

### **Which flea species creates problems?**

A country like Denmark has more than 40 different flea species of various biology and habitats. However, when it comes to cats and dogs, problems are caused by the cat flea, scientifically known as *Ctenocephalides felis*. Therefore, facts about this particular flea are introduced below.

### **What are fleas?**

Fleas are bloodsucking insects. They go through four different life stages of egg, larva, puppa, and adult. The indoor habitat of a cat flea's eggs, larvae, and puppae consists of cracks and crevices or carpets in rooms that houses their most common host, such as dogs or cats. Also the adult fleas are living in this environment, until they jump on a dog or cat. Afterwards, they will stay on their host for the rest of their lives.

### **When are fleas normally a problem?**

Flea infestations are very seasonal, as the flea larva is thriving poorly in a cold or dry environment. Consequently, a certain multiplication of fleas takes place during the months of spring, followed by a surge in autumn. Special attention to fleas should primarily be paid during the period from late summer till around Christmas time.

Problems caused by fleas are mainly related to houses. In the summer, however, multiplication of fleas may also take place in protected outdoor areas like covered kennels, outbuildings, cellars, and under dense shrubs. Fleas found on dogs and cats in the spring may also be bird fleas that are very active at this time of year. However, bird fleas are not able to live and breed on dogs and cats. Therefore, if bird fleas are found on a cat or a dog, the problem will just be temporary. Please see the overview below of how to distinguish between different flea species.

### **How to detect fleas on cats and dogs?**

If a cat or a dog scratches itself more than usual, this will be a clear indication of a flea infestation. Consequently, the cat or dog should be placed on a newspaper and checked with a flea comb. Prior to the combing, long-haired breeds or coats that are ruffled and tangled should be groomed with a brush. Loose hair which falls down on the paper can be put in a clear plastic bag, giving the time and opportunity to study the hair closely and to show it to the veterinarian, if necessary.

If fleas are detected on the animal, they will be visible as either large blackish-brown female fleas or the smaller male fleas. White pearl-shaped eggs (0.5 mm) or black flea feces may also appear. A method to distinguish the feces from sand or dirt is to place the material on a moist piece of paper or in a plate filled with a little water. If it dissolves into a redish-brown fluid, feces from the cat flea is present. This method is not suitable to detect feces from other types of fleas.

### **What do fleas feed on?**

Adult fleas feed on blood, which they are sucking from their host. The larvae, however, feed on organic debris such as dried flea feces which contains residues from the digested blood meal of adult fleas. The development period from an egg to the adult flea depends primarily on the temperature and may be completed in as little as 14 days at 32°C or be prolonged up to 140 days at 13°C. On its host, the female flea is capable of producing more than 25 eggs a day. The eggs are not sticky, and they will fall off the dog or cat together with the flea feces.

### **Where can fleas be found?**

It is very time-consuming to get rid of fleas. When detected on a dog or cat, the fleas have often been present for quite some time. Only a few fleas may be found on the animal itself, however, a lot more fleas are spread around in the house. Just about 5 % of the total amount of fleas in homes are found on the dog or cat. The remaining 95 % of the fleas are hidden in cracks, crevices, carpets, and other suitable places.

### **Why do fleas occur, even upon treatment of the cat and dog?**

Even after treating the infested animals, fleas will still occur for a shorter or longer period. The reason may be the impossible mission to remove all fleas from the surroundings. That applies especially to the fleas hidden in carpets in cracks and crevices of the floor, and in other similar places. In these areas, the fleas are protected by their cocoons that enable them to hatch later. Eventually, the fleas will die, provided they are "collected" by a dog or cat who has already been treated for fleas.

Please note that it may take hours before a flea dies, after having jumped on a treated dog or cat. In case of a severe flea infestation, it will last several months until the last flea has been removed. A good advice to get rid of fleas in the surroundings is to place a flea trap in selected places of the house.

### **How to control flea problems?**

An effective and easy method to control flea problems is to treat the dog and cat on a preventive basis. Such treatments prevent fleas from multiplying themselves without any disturbances. No treatment could lead to their re-occurrence in great numbers and everywhere in the house. Therefore, preventive treatments should be given before any flea infestation occurs. Additional use of flea traps will show if fleas are present in the surroundings.

### **Which actions to take if the dog or cat is allergic to fleas?**

If a dog or cat is allergic to fleas, a continuous and preventive treatment is needed to avoid any flea infestation. This protection can be achieved by the means of a preventive flea treatment throughout the whole year.

### **Which actions to take when the dog or cat is infested?**

If fleas are found on a dog or cat, it is important to start a flea treatment of the animal, immediately. Please note that not all products are suitable for both dogs and cats or puppies/kittens. A veterinarian will inform about the options. In addition to a specific treatment of the dog or cat, it is important to control the fleas in the surroundings. This may be done as follows:

- frequent and careful vacuum cleaning in all places, related to the dog or cat, including couch cushions, cars, cellars, etc., preferably on a daily basis for 30 days
- washing the dog's or cat's bed, blankets, etc. at 60 degrees Celsius
- placing a couple of flea traps in the house or flat

When a dog or cat is treated, the flea that jumps on the animal will die relatively fast. However, up to 3 months may pass, before the infestation is under control. In severe cases, this period will be prolonged.

### **How about alternative methods against fleas?**

Many alternative products for flea control are on the market, and a couple of popular methods will be mentioned here. Ultra-sound devices are marketed as very efficient as to the control of various creeping and crawling insects, including fleas. These devices have been tested by research institutions, such as the Danish Pest Infestation Laboratory (Skadedyrlaboratoriet), and they had absolutely no impact on fleas or other pests, for that matter. These findings also apply to Vitamin B and garlic.

Contrary to the above conclusions, also thorough tests of flea light-traps have been carried out, and some have proven very effective in their ability to catch fleas in the surroundings. The design of some of these traps is based on scientific research and a specialized knowledge about the flea's natural host-seeking behaviour. They function by a light that switched off at certain intervals. When the light switches off, the flea mistakes it for a host passing by, such as a dog or cat. As a result, the flea will jump towards the trap, where it will get stuck on the sticky-pad of the trap.