

# FLEAS !!!!!

They are taking over the suburbs ..... Well not really but it sure seems like it. The weather has been ideal lately and they're hatching in record numbers. We are frequently hearing from clients that they've never had problems with fleas before but this year they are overwhelmed. The flea cycle explains a lot of what is happening and also helps us to understand how best to fight the invasion.

The adult flea can lay 50 eggs per day. The eggs can take from 2 days to several months to hatch depending on the conditions and make up about 50% of the flea population. They are laid on the animal but then fall off into the environment and wait for ideal conditions to hatch. Warm, moist conditions accelerate the hatching process into the next stage, larvae. The larvae feed on faeces of adult fleas (which is mostly dried blood) and other organic debris found in carpet, bedding and soil. They need moisture to survive so won't be found in direct sunlight or a dry environment. There are several stages of larvae and it can take a week to several months to complete this part of the life cycle. The larvae then spin a cocoon and forms pupae.

The adult flea can hatch from the cocoon as quickly as 3-5 days or can wait as long as a year for the right conditions. Again, warm temperature and high humidity are ideal as well as the presence of a host to feed from. As you can see, the life cycle is quite variable and can be anywhere from 2 weeks to 2 years long.



This is one of the reasons that fleas can be so difficult to eliminate. The other reason is because we tend to focus on what we can see which are the adult fleas on the animal. If we only treat the adult fleas, then we are missing most of the life cycle and destined to fight a losing battle. Start with the pet but don't forget the environment.

There are several ways to treat and prevent fleas on pets. Just bathing does little but remove the fleas that are currently on the host. As soon as the host goes back into environment, new fleas take their place. Shampoos, flea powders and flea sprays have little or no effect. Flea collars similarly are not very helpful. Long acting products are available that can be applied once a month. There is one spray and several spot-ons that can be applied once a month. There is also a tablet that can be given monthly as well. Advantix, Advantage and Advocate are the main spot-ons. Revolution is a spot-on that does worms as well. The active ingredient in each is different and variable results are found depending on resistance of the resident flea population. The length of time the long acting products work can vary depending on the frequency of washing and if the pet swims a lot. Many of the products contain an egg inhibitor so that fewer eggs hatch.

There is a relatively new product on the market, Comfortis. Comfortis is a once a month tablet and most dermatologists are recommending it to be used on flea allergic dogs. We've found it works very well in managing flea populations and can be used in conjunction with other products if tick prevention is needed. An added bonus is that it doesn't wash off.

So now that we have covered what we can see, we have the rest of the life cycle to take care of. Eggs, larvae and pupae can be removed from the house environment by vacuuming and cleaning bedding but probably you won't be able to get them all. Sprays and flea bombs after cleaning are good ways but remember the life cycle. Nothing can penetrate the pupae so if only one or two treatments are applied, there will always be some waiting to hatch out. Outside is a little more difficult but shaded, sandy areas and especially under houses are where they like to live so treating these areas with products like Coopex is helpful. Fleas do not like acidic soil so lime well-watered in is useful as well.

It's best to treat with Coopex every two weeks for at least three treatments but as we know from the life cycle, this works best in ideal flea conditions. If there is a long period of cool weather, there won't be as many fleas hatching so the treatments won't be as effective. The fleas will be waiting for the warmer weather and the cycle starts all over again. One flea can lay over a thousand eggs in their lifetime so if you see one or two, just think what's out there waiting!

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