

# HEARTWORM in CATS

**M**ost pet owners are very aware of the problem of heartworm in dogs, and, because it is now a very common problem (80% of dogs not on effective medication have heartworm in Sydney), responsible owners medicate their dogs regularly to prevent the devastating illness that a large heartworm burden causes for the dog.

**How big is the problem of heartworm in cats?** Well, if you are a cat with heartworm, it is (a) going to be very difficult to find out about the heartworm (no good reliable tests in cats yet, even X-rays of the chest are not definitive, and Ultrasound / Echocardiography is a bit hit-and-miss) (b) you are going to have lung problems for a long time, even if the heartworm is cleared (c) treating you for your heartworm has a 1 in 5 chance of killing you (d) **NOT** treating you for your heartworm leaves you with a 1 in 5 chance of dying from it anyway. And literally right there in front of owner and vet, as the reaction to the dying heartworm is so powerful. **What to do?** Prevention is much better than cure, so read on.

In Sydney, 15 years ago, 2% of cats had heartworm in their hearts and lung arteries. Since one of the symptoms of heartworm disease is **SUDDEN DEATH**, it is a bit hard to find out how many are really affected. The other main symptom is **CHRONIC COUGHING**, often put down to Feline Asthma (or ignored). Some cats' asthma are triggered by migrating heartworm larvae, so while they may not kill the cat, they do make life a burden. Some of the other symptoms are **VOMITING** intermittently, and sometimes, just **WEIGHT LOSS**. In fact, the symptoms are a pretty nebulous lot, with no big clues.

## **What is heartworm and where does it come from?**

Heartworms are thin string like worms that live and reproduce happily in the heart of dogs. When boy meets girl (in literally an affair of the heart!), their offspring are microfilariae (little wrigglers) that swim around in the dog's blood. A mosquito feeds on the blood, gets a microfilaria as part of the dinner, and then injects it back into the next animal it feeds on. If this happens to be your cat, the microfilaria changes character to become a larva and then migrates from the skin to any number of places (heart, lungs, brain, spinal cord, kidney) and cause trouble as it grows. Fortunately, the cat rejects most of the larvae, but the intense allergic reaction that this sometimes takes may cause problems in itself (coughing being the main one, as most of the larvae do make their way to the lungs). If the larva ends up in the heart, then as it matures into a full-size heartworm and lives there a while, it will cause damage in the tissue around it, and when it dies, it may kill the cat from the intense allergic reaction it induces then.

## **What is the difference between heartworm in dogs compared to cats?**

Heartworm is a parasite that has evolved to live in dogs' hearts, and a dog can quite often have a few Heartworms without any problems, and these are picked up on the routine testing carried out on most dogs at various times. Even small dogs can have a few worms in their heart without showing signs of disease. However, even one worm can cause a problem in a cat (and interestingly also in ferrets), not because of the comparative size of the worm to the heart, but because it causes a strong allergic reaction in the lining of the cat's heart and arteries, and that is what causes the symptoms, and also the death of the cat (it is not simply that the worm causes an embolism or blockage of the blood vessels in the lungs when it dies, it is the cat's own over dramatic response which is life threatening, and known as anaphylactic shock). Blood tests for the worms themselves are somewhat unreliable as they rely on there being a female in residence to make the test work usually, although the newer tests are picking up males sometimes. For the moment the most reliable way to pick up heartworm problems in cats is by X-ray, looking for the allergic reaction in the blood vessels, or by Echocardiography and seeing the worm moving in the heart. Interestingly, humans also get heartworm, but it is usually an incidental finding during open heart surgery. It would be a bit of a surprise for the surgeon though!

**Who is at risk?** Heartworms are transmitted by mosquitoes, so anyone can get bitten. The migrating larvae cause low level illness and no one knows how commonly that occurs. The adult heartworm causes trouble wherever it is (heart, lungs, brain, spinal cord, anywhere). Treatment is unreliable and unpleasant, and one of the symptoms of the disease is sudden death so there is often no opportunity there to treat anyway. It is possible to prevent it easily with **Revolution**, which kills nearly all the parasites which afflict the modern cat. It kills **Heartworm** (larvae), Roundworm, Hookworm, ear mites, skin mites, adult **fleas**, flea larvae and flea eggs. It is very easy to apply to the back of the neck, is absorbed into the cat's blood within minutes, then circulates for 1 month, killing all the above mentioned parasites during that time. **Revolution** is the tried and true all rounder, but there are also these alternatives: Advocate spot-on also does all the parasites, and Heartgard or Milbemax tablets are for the those cats who only need Heartworm and Intestinal worm control. Ask us how to choose a custom made solution for you and your cat!

If you want to receive these newsletters and other items of interest by email, please send your cat's name and your name in an email to [catclinic@catclinic.com.au](mailto:catclinic@catclinic.com.au) All seminar and other information goes out electronically first!

**East Chatswood Cat Clinic Ph: 9417 6613**

**329 Penshurst St. Willoughby NSW 2068**

**EASY PARKING - REAR LANE W22 ACCESS OFF VICTORIA AVENUE AND OPEN 7 DAYS**

Produced by Rayzor Sharpe Designs

Ph: 02 9869 3664 • Email: [rayzor@bigpond.net.au](mailto:rayzor@bigpond.net.au) • 7a Park St. Epping NSW  
If you like the look of this publication, then contact Ray and let him do it for you too!



*Exclusively*  
**for cats**

329 Penshurst St.  
Willoughby NSW  
2068

# East Chatswood Cat Clinic Handout

**Pesky  
Parasites**

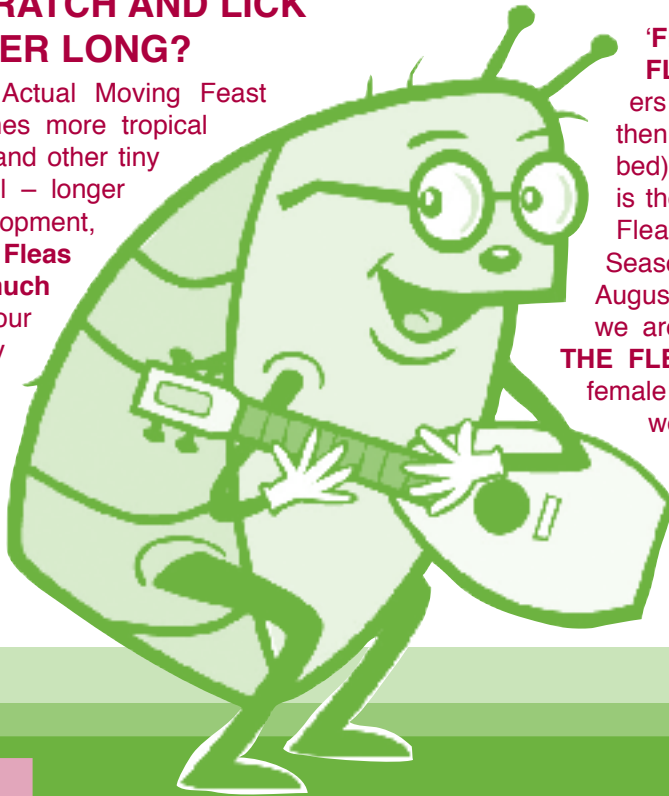
[www.catclinic.com.au](http://www.catclinic.com.au)

Ph: 9417 6613

## SAVE US FROM FLEAS PLEASE!!!

### DOES YOUR CAT SCRATCH AND LICK HERSELF ALL SUMMER LONG?

**I**t must be hard being an Actual Moving Feast for fleas! As Sydney becomes more tropical (blame who you like!), fleas and other tiny pests are getting a better deal – longer ‘perfect weather’ for their development, and more ‘habitats’ to grow in! **Fleas love your carpet almost as much as they love your cat!!!** If your cat strolls outside, even for only a few moments, they can bring back a colony of fleas, who stay on board while they feed and breed until the cat picks them off herself. (Some cats just can’t be bothered, or are too young or too old to be able to catch them and so become



‘**FLEABAGS!**’). The **EGGS** and **FLEADIRT** laid by these freeloaders – or should I say flealoaders!!- then come into your home (and your bed) with your feline mate. And that is the start of your annual Summer Flea Plague. These days, Flea Season is starting earlier, more like August than October, so by October we are **TWO GENERATIONS INTO THE FLEA SEASON**. At 40 eggs per female flea per day and only three weeks from ‘egg to egglayer’-

**YOU CAN DO THE  
CALCULATIONS!!**

#### Question:

**What can you do now! You don't want fleas in your house!  
or on your Cat!**

#### Answer:

**You have to Control the Eggs as well as controlling the Fleas**

**A**nd it has never been **EASIER** than with **REVOLUTION**. With Revolution killing the Flea Eggs, Adults and Larvae, no matter where your cat goes (including boarding...), your home and hearth will never have fleas. If your cat will wear a collar, and only ventures out occasionally, then the **PROTECT-A-CAT** collar will kill flea eggs on your cat’s coat for 6 months!

Once the house is flea egg-free then you will never have the little blighters biting you! Your cat will be comfortable no matter where she goes when she goes outdoors – even if

there are millions of fleas outside, as Revolution will kill the majority of ‘Easy (Flea) Riders’. A few fleas on a cat is not a terrible thing – Fleas and Felines have coexisted for a million years (and cats therefore can build a tolerance to a certain level of infestation)! There are a couple of alternatives to Revolution – however Revolution is the original ‘all round Pest Exterminator – Fleas, Flea eggs, worms and Heartworm).

The environment has never been better for fleas and their Plague Proportions bother everyone. There are **MANY STRATEGIES** for flea control ask us how, **NOW!**

**WARNING**

### **THE DOG PRODUCT ‘ADVANTIX’ KILLS CATS**

**It has Permethrins in it which are fine for dogs, but make cats very ill. Advantix IS NOT THE SAME AS Advantage nor Advocate for cats.**

# Flea facts that will help you control Fleas in your Environment

**FLEAS PREFER FUR!!** Fleas spend most of their time on your cat!  
**FLEAS HAVE PERFECT CAMOUFLAGE!!** If you can see 1 flea, there are 10 more you can't see!  
**FLEAS LAY 40 EGGS PER DAY!!** Once they've had a meal from your pet!  
**AND WORSE - THEIR EGGS (AND COCOONS) ARE ALMOST INDESTRUCTIBLE!!**

The problem with fleas, is they are very well-adapted to our environment - they seem to get more out of living in our houses than we do!! They have been around for millions of years and their survival mechanisms are very efficient This is a brief description of the products we have available to assist in flea control, so feel free to discuss the problem in more detail with us. Everyone's pets and household are different - the fleas customise their living patterns to your house, so your control needs to be customised too!!!

**FLEA CONTROL - at least of the eggs - HAS TO BE YEAR-ROUND – by mid-summer the problem is huge so BY MID AUGUST YOU WILL HAVE TO THINK FLEAS!**

**CATS WILL PICK OFF 50 FLEAS A DAY FROM THEIR OWN COATS IF THEY CAN, SO THE ONES YOU SEE ARE THE TIP OF THE ICEBERG!!**

**FLEA EGGS ARE THE PERPETRATORS OF THE PROBLEM – YOU MUST GET RID OF THEM FIRST AND KEEP THEM OUT OF YOUR ENVIRONMENT – NO FLEA EGGS, NO FLEAS!!**

This is essential if you have a substantial flea problem and the fleas are biting you, or a pet with a flea allergy. Although the fleas spend all of their time on your pet, they shed their eggs into the environment to hatch, especially in the nice warm places your pet chooses to sleep!!! FLEAS WILL NOT GET OFF YOUR PET. Your bites are from freshly hatched flea cocoons, so you will have to treat the house.

**HOUSE FOGGERS OR BOMBS** - these speed up the elimination of fleas from your environment if the fleas are biting you!

There are many makes and models but the essential ingredients to success are

- (1) **Plan to do all the carpeted areas** (no need to do the bathroom and kitchen as the residual egg-killing chemical will be wiped off next time you mop)
- (2) **Vacuum thoroughly FIRST**, and **MOVE ALL THE FURNITURE**, as the eggs are under the couches and at the edges of the room where there is less traffic, and move the cushions off the sofa so the fog goes down the back where the dust is!
- (3) **USE ENOUGH BOMBS**. Supermarket ones often only do 1.6 Squares so you need many more of them. Ours do 5 - 7 Squares so usually two or three will do a small house. Please ask us how to use them effectively.

**STEAM CLEANING** - unfortunately will not get rid of cocoons from carpets and upholstery even if done professionally. The machines do not get hot enough to kill the cocoons, as they just emit a fine spray deep into the carpet, but it will wake them up!

**HOT WASHING BEDDING** helps (70 degrees Celsius kills flea eggs & larvae)

**PEST CONTROL PROFESSIONAL** – may be more economical in big houses or if severe flea problem

**SURFACE SPRAYS** – If you have mainly Floorboards and only need to spot spray rugs and furniture, then the PROTECTA-HOME SPRAY is designed to be sprayed on all the upholstered and carpeted areas where your pet goes. To use it most effectively, you need to vacuum the carpet and furniture, then spray lightly (hold the BOTTLE at waist height as you go around the edges of the room) all over the main carpeted areas AND DOWN THE BACKS OF THE CUSHIONS OF YOUR PET'S FAVOURITE CHAIR!!! This product kills any adult fleas that are resting off your pet, and also prevents the flea eggs from becoming adult fleas (the fleas are trapped in adolescence so they don't develop teeth to bite you or your pet). It works for about six months and does kill the new eggs that may fall off an untreated pet.

## Fleas in the House

**Q: What other problems can fleas cause for your cat?**

**A: Fleas can inject a blood parasite called *Haemobartonella felis henselae* is transmitted the same way. Tapeworms transmit through diseases with very long names that have now virtually disappeared. Your cat will be better than average and your cat will be healthier for it!**

# Daily Grooming with Fine Tooth Comb

## THIS IS THE SINGLE MOST IMPORTANT PART OF ANY FLEA CONTROL PROGRAMME!!

Daily grooming with a flea comb (and it must be a very fine-toothed one) does three jobs in one

- (1) Checks for fleas and flea dirt so you know how big your problem is
- (2) Removes dead hair daily so less is shed around the house

- (3) Socialises your cat in a "Mutual Grooming" scenario like mother and kitten, so both of you enjoy it!

If you combine **COMBING** with a **FLEA EGG CONTROL SYSTEM** (Protect-a-cat Collar), then you can achieve excellent, environmentally friendly Flea Control! If you need more power, then Revolution (or Advocate) is the way to go! Frontline, these days, works mostly for ticks.



## URBAN BANDICOOTS?

# YES

## and they bring their ticks too!

**B**andicoots are learning to live with us. Our well-cared for gardens are supplying them with grubs, and playing host to the ticks which fall off when they visit. The **PARALYSIS TICK** has to spend part of its life on either a possum, kangaroo or bandicoot, and it used to be that you or your pet had to go to visit them in the bush to pick up a tick. However, now the bandicoots are straying **UP TO HALF A KILOMETRE** from bushy areas to dig up front lawns and incidentally drop their ticks for your pet to pick up. The signs that a bandicoot is visiting your yard is the little 'dibble' marks they make with their noses to get to the worms – it looks like someone has been trying to plant daffodils on your lawn at night! Seriously though, **THE TICKS CAN KILL PETS** and make people sick, so assess your geographical risk – and remember that bandicoots don't drive down roads

– they follow a straight line from their bush to your yard (golf courses are great spots for bandicoots these days too). Remember also that you can bring ticks home in your clothing and they can then attach to your pet. This is rare, but has happened. Talk to us about **FRONTLINE** spray and Frontline Plus spot-on. If you put enough Frontline on, it will kill most of the ticks. In bad tick areas, you may even need to use Proban every second day. However, nothing supplants a daily check over for ticks – leave nothing to chance. Also, once a cat has been treated for a tick and given the antiserum, that cat may die from another dose of antiserum because it is dog serum and the cat can have a strong allergic reaction the second time (sometimes even the first time). The summer is to be enjoyed by everyone, including the bugs and mozzies, so please just beware.



into your cat, which causes fever and anaemia. Another bacteria involved in Cat Scratch Disease called *Bartonella* through fleas, and of course, cats can become **VERY** allergic to flea saliva and get all scabby. There are a couple of other red since **Revolution** came along! The average Aussie pet owner treats their cat for fleas for only 4 months a year –