



# Pet Waste Watch



Fleas, ticks and worms are parasites that dog owners must be mindful of for their pets. Vets often advise a prophylactic use of flea and tick treatments monthly to prevent the opportunity of parasitic activity, applied orally or topically. However, recent research has highlighted that using flea treatments like this is causing detrimental impacts to the environment.

Flea and tick treatments are insecticides that target invertebrates (including parasites). The active ingredient in several popular brands are imidacloprid or fipronil, both chemicals that have been banned in the EU for agricultural use due to the human health risks and toxicity to pollinators (e.g. 1 gram of imidacloprid is enough to give a lethal dose to 250 million honeybees).

Interestingly, veterinary products are not subjected to a detailed environmental risk assessment, due to the idea that only one animal is treated at a time. While the impact of one dog's flea treatment on the wider environment may be small, the impact from the estimated 20 million dogs (and cats) in the UK (80% of which are treated with flea treatments) is alarming. Recent research by scientists, including Buzz Club Director Prof. Dave Goulson, has shown that the chemicals in flea treatments come off pets and remain active in the environment for weeks (e.g., bed washing and dog swimming is polluting water bodies and shed fur is being used for birds' nests).

There are identified gaps in our understanding of the fate of veterinary treatments in the environment. Pet Waste Watch will look into whether the presence of flea treatments or other drugs effects the degradation of dog faeces. Not a glamourous project, but an important one!

Faecal waste from dogs is considered to be 'offensive waste' in the UK due to the risks of contamination it provides to the environment via a) pathogens and natural chemical composition e.g. high nitrogen levels b) contamination via veterinary treatments.

We want to look at the speed at which dog poo breaks down naturally outdoors, and how this relates to the insecticidal treatments that the dog has received. Do these treatments slow down the process? Are the invertebrates that play important roles in decomposition affected?

We are asking dog owners to:

- Register your dog as a citizen scientist with us!
- Record the degradation weekly of one of your dog's poos.

We will also throw a 'Dogs as Scientists' photo competition!



# What we need from you!

You can take part if you have a dog and a private outdoor space.

## 1) Register your interest on our website

You will then hear from us via email with the next steps! These are outlined below but will be explained in further detail via email.

## 2) Tell us about your dog!

We will need to know a few details about your dog, including age and weight, along with details of your pet's last flea treatment.

## 3) Your survey

You will be sent a form for data collection. When your dog next poos, the survey can begin! You will need to measure the poo, note the date and watch it for 1 minute for invertebrate activity. We will also ask you for weather conditions.

You will need to complete this weekly for 9 weeks (the approximate time of degradation).



**We need your help to get more environmentally conscious dog owners involved!**

Please share a photo of your dog on socials with #PetWasteWatch

Suggested caption:

*[Enter dog name] and I are taking part in the Buzz Club's #PetWasteWatch to help protect the environment from pesticides! Make a difference to real science and join in this research today. All you need is a dog and a private outdoor space. Find out more here: <https://www.thebuzzclub.uk/pet-waste-watch>*



**Any questions? Contact us!**

Email: [buzzclub.uk@gmail.com](mailto:buzzclub.uk@gmail.com)

Website: [www.thebuzzclub.uk](http://www.thebuzzclub.uk)

