
Fleas and Ticks

As spring grows closer everyone is starting to get cabin fever, even our pets. With the warmer weather comes fleas and ticks. Fleas and ticks can quickly become a major problem but are easily be prevented.

Fleas



There are two common types of fleas, *Ctenocephalides felis* (the cat flea) and *Ctenocephalides canis* (the dog flea). Fleas go through 4 different life stages. The first stage are eggs. The eggs are deposited onto the host animal and then fall

off into the environment within a few hours. The eggs are pearly white in color and are oval shaped with rounded ends. They are not able to be seen with the naked eye because they are 0.5 mm in length. Once the eggs hatch they become larva. Larva are maggot like in appearance and are covered in hairs. They are a little bigger than the eggs at 0.5 cm but are still not easily seen with the naked eye. The larvae eat the blood that is present in the adult fleas' feces, organic debris, the flea eggshells and other larvae. The larvae will not develop outdoors in areas that are exposed to sunlight, the larvae need cool shady areas where pets rest to develop. Indoors development occurs in areas that are undisturbed and protected such as in carpeting, under furniture and along baseboards. The speed of development from larvae to pupae depends on temperature and humidity. Pupae have whitish cocoons that are about 0.5 cm long and can be found in the soil, on vegetation, in carpeting, under furniture and on animal bedding. The adult fleas start to come out of the pupae cocoons after spending about 8 days in them and are done emerging after 13 days under ideal conditions (72.5°F and a relative humidity of 78%). The adults can remain in the pupae in a sort of hibernation for up to 30 weeks at temperatures of 51.8°F and 75% humidity. Once the fleas emerge from the pupae cocoon they are considered adults and start to feed on a host. The adult flea feeds on blood from the host and their feces produces a reddish brown color that resembles rust when it is wetted down with water but looks like dirt on the host animal giving it its name, "flea dirt". The adult female flea starts to produce eggs 20 to 24 hours after her first meal and can produce 40 to 50 eggs per day.

Fleas use both thermal and visual clues to find host animals and newly emerged fleas can only survive a few days before needing a blood meal. In most homes the fleas will die off within 1 to 2 weeks if they cannot find a host animal for a blood meal. Fleas are the most common external parasite of dogs and cats in North America, however they are less common in areas such as the desert southwest and the Rocky Mountain States because the humidity tends to remain below 50% in these areas. The most common way for an animal to come into contact with fleas is through coming into contact with recently emerged fleas from an infested environment, however fleas can move directly from one host animal to another. The most common symptom of fleas is itching, however there are other symptoms as well. Some of the other symptoms are blood loss due to a flea infestation and flea allergy dermatitis which is a hypersensitivity to a component of the fleas' salivary glands. Fleas can also transmit tapeworms to dogs and cats.

Fleas are diagnosed through a physical examination. Most commonly the flea dirt is identified by combing the animal with a very fine toothed flea comb and wetting down the material that is pulled off of the comb. However fleas can occasionally be seen moving on the animal as well.

To treat fleas the easiest way is to apply a topical flea and tick preventative such as Frontline®, Revolution® or Vectra® to the affected animals every two weeks for two months. The flea and tick preventative cannot be applied if the animal has had a bath in the last 48 hours or if they will be exposed to large amounts of water within 48 hours. This is because the flea and tick preventative uses the oils that are present in the skin to disperse throughout the body. It is also very important to clean the environment where the animals live. To do this wash anything that is able to be washed such as bedding and clothing and to vacuum things that cannot be washed such as carpeting and furniture. Once you are done vacuuming you will need to throw the bag from the vacuum away or empty out the vacuum canister and to make sure that you remove these things from the house. It is necessary to clean the environment at least once a week for 3 to 4 weeks to ensure that the eggs as well as the adult fleas are removed from the environment.

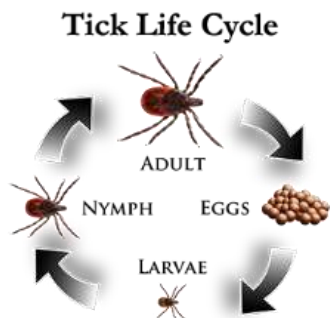
Fleas are very easy to prevent by applying a preventative product once monthly to each animal in the household. It is recommended to treat the cats in the household even if they do not go outside because the dog could bring the fleas into the house and infest the cats. To deter fleas from the bedding of animals that stay outside you can place Cedar wood chips in the bedding.

Humans are not a preferred host animal for fleas however they can end up on humans for a short period of time and during this time they can take a blood meal resulting in flea bites to you. This is typically common in a severe infestation.

Ticks



There are several different types of ticks but they fall into two different categories either hard ticks (deer ticks) or soft ticks (dog tick which is also known as the wood tick). There are four different life stages for ticks the egg, larva, nymph and adult. While all ticks go through these same for life stages they go through them at different speeds depending on the species.



Ticks can cause severe blood loss if there are enough of them taking blood meals on a host animal. As the tick gorges on blood they grow in size. An adult female deer tick can ingest 100 times her weight in blood resulting in a 100 fold growth in size. Irritation and itching typically occur where the tick is attached to the host animal. Ticks can also carry several different diseases such as Lyme disease, Anaplasmosis and Erlichiosis.

Ticks can be found throughout the United States and are most common in areas such as the northeastern, upper Midwestern and western coastal states. The best way to diagnose an animal with ticks is by finding them on the animal. It is important to either remove them right away or to have them removed as soon as possible. The easiest way to remove a tick is to grasp as close to the skin of your pet as possible with

a tweezers and pulling using a slow and steady pressure. Do not crush the tick, twist them, or jerk the tick out. It is very uncommon to leave the head of the tick in your pet if you remove the tick this way. It is recommended that if you do find ticks on your pet to have a 4Dx heartworm blood test and tick borne disease panel done in 6 to 8 weeks to ensure that they were not exposed to any of the tick borne diseases. It is also a good practice to have your veterinarian do a 4Dx test every year. If your pet is diagnosed with a tick borne disease a 28 day course of antibiotic will be prescribed.

Tick prevention is easy to accomplish with the use of a monthly preventative product such as Frontline®, Certifect® or Vectra®. If your dog frequents areas that are known to have a lot of ticks it would also be beneficial to have them vaccinated against Lyme disease every year.

While dogs cannot give you ticks, you can be exposed to ticks while being in the same areas as your pet. The best way to avoid this is to use repellent product and remove ticks as soon as they are found. Wearing light colored clothing allows spotting ticks easier.

If you have any further questions please feel free to contact us at (920) 668-6212 or send us an email at info@cgvet.com. You can also learn more about fleas and ticks by going to <http://www.capcvet.org>.