

Those Bloodsucking Fleas

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Fleas are insects that are solely bloodsucking in their adult stage. Control of fleas in and around the household and on pets can be expensive and if not controlled, a recurring problem. However, successful control can be achieved if the homeowner is willing to take the time to understand how an integrated flea control program works. It is important, therefore, that the homeowner has some understanding of the flea's life cycle, its preferred environment, hosts, and methods of control.



Fleas go through four different stages of development: egg, immature stages, pupa, and adult. Flea eggs are pearly white, oval and are about the size of a grain of sand. Eggs are usually deposited in a dog or cat's resting area. Places where the pet spends most of its time will have the greatest numbers of eggs deposited. This is where control measures should be concentrated.

Flea larvae (more than one flea larva) are slender, yellow to brown in color, and about one-eighth of an inch in length. Larvae are free living and feed on organic debris found in their surroundings. Larvae do not like direct sunlight and live deep in carpet fibers or under organic debris (such as grass and leaves) or soil, looking for food. After completing development, the mature larva will move to an undisturbed site to produce a silk-like cocoon and pupate.

Adult fleas are stimulated to emerge from the cocoon by heat, vibrations, and carbon dioxide. The cat flea, which is commonly found on Guam, attacks both cats and dogs. Young adult fleas are drawn to pets by the warmth of the animal's body, movement, changes in light intensity, and exhaled carbon dioxide. The adult flea has very powerful back legs, which they use for jumping onto their host. Newly emerged adult fleas that are found in carpets or outside

resting places of pets will jump towards the source of stimulus (warmth, movement, etc.) and try to attach to a suitable host. Even though humans are not preferred hosts, newly emerged adults will bite humans while seeking their preferred host (either dog or cat). Adult fleas are dependent upon a constant blood source for their survival. Once feeding has started, the adult cat flea must have access to a blood source almost continuously.

Methods of Control

A complete flea control program must involve the treatment of the pet, indoor control, and outdoor control.

Pet Treatment: If a cat or dog lives either inside and/or outside the house, the homeowner needs to take certain steps to safeguard pets from fleas. Fleas are found on Guam throughout the year. The pet bedding should be washed on a weekly basis along with any other material the pet might sleep on (rugs, rags, etc.). Remember that

flea eggs are usually deposited in the pet resting area and need to be disposed of. Pets, especially dogs, should also be given a bath with a flea shampoo at least once every two weeks. Most pet and some hardware stores on Guam sell flea shampoos (liquids), flea dusts (powders), flea sprays (pre-mixed solutions), and flea collars. Some cats and dogs may show skin sensitivity to the collar. Ideally, a clean pet is less likely to have heavy flea infestations compared to a pet that is not kept clean. A pet is like a child, it needs to be fed and properly cleaned and sheltered. There are a few systemic chemicals (in pill form) that can be administered to either dog or cat that can help reduce flea infestation on the pet. For more information about these products, please contact the local veterinarian.

Indoor Control: If a flea infestation is found within one's home, the use of a vacuum cleaner, equipped with a beater-bar (a roller with brushers), can remove a certain percent of both eggs and larvae. Shampooing and/or vacuuming carpets raises up the carpet fibers to allow for maximum penetration of applied insecticides. It is also advisable to thoroughly vacuum furniture. Reminder – after vacuuming, it is very important to dispose of the vacuum bag immediately, as eggs and larvae will

continue to develop inside the bag and act as a flea reservoir. Place the vacuum bag inside a plastic garbage bag, seal the garbage bag outside for garbage pick up. Once a thorough mechanical control is completed, it is advisable to apply both a residual insecticide and an insect growth regulator for flea control immediately.

Outdoor Control: Elimination of fleas outside the home should be done in conjunction with indoor control. Areas in the yard protected from direct sunlight and where the soil is moist are ideal conditions for flea development. Remember, flea eggs are usually deposited in the pet resting area (bedding materials and soil where the pet sleeps on). When treating a yard with a flea insecticide, a homeowner should concentrate spraying around gardens, bushes, mulch, or other moist, shaded areas. Spraying insecticides over the large expanse of a shade-free lawn will generally not be beneficial. Remember that mowing and raking the yard and removing organic debris from under bushes, trees, etc. prior to spraying will enhance any insecticide program.

For more information about fleas or other household pests, you can contact your local Cooperative Extension Service on Guam or throughout Micronesia.

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