



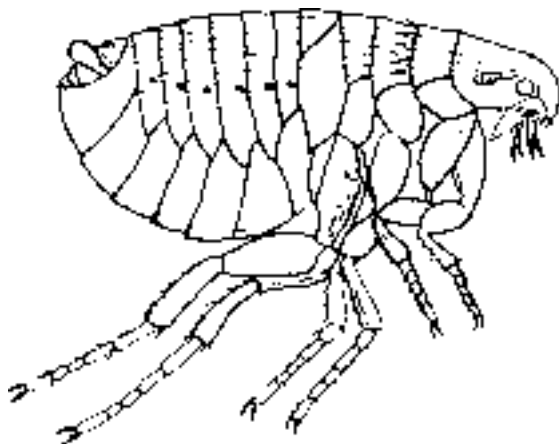
## FLEA CONTROL

Fleas in or around the home are usually linked with a pet dog or cat.

The hopping, brown, flattened from side-to-side, adult flea is easily recognized by many people. But pet owners may not be aware that the same flea that feeds on a dog or cat will also bite people—piercing the skin, sucking blood, and leaving a red, itching “spot.”

Female fleas, after feeding on blood, lay eggs that hatch into a small, white, active, wormlike stage, which grows to about 1/16 inch long. This stage may be found by homeowners in the “bedding” of flea-infested pets. These larvae appear to live on debris and organic matter, including dried blood found in adult flea feces. They cannot pierce the skin of people or pets.

When fully grown, this wormlike stage enters a less active pupal phase in a silken cocoon in which small



Diagrammatic view from right-hand side of adult dog flea—actual size about 1/16 inch long.

pieces of background material are encrusted. These cocoons are sensitive to mechanical disturbances. People entering a long-deserted house sometimes complain of hordes of fleas suddenly appearing “from nowhere.” It is probable, in such cases, that fleas resting in the cocoon, in floor cracks and crevices, come out in response to people moving near them.



Diagram of white, wormlike, larval stage of dog flea—actual size 1/16 inch long.

### Control

Flea control works best when you follow **all** necessary steps. If you only use one or a few of these steps, do not depend on adequate flea control. The following courses of action are essential to maintain a good flea control program:

- **Sanitation.** Vacuuming is an extremely important part of a flea control program. Thoroughly vacuum all areas of the house, including rugs, upholstered furniture, and cracks and crevices where possible. Do this more frequently than the average homeowner does. Vacuum about every third day for a couple of weeks. Be sure to dispose of the vacuum cleaner bag after vacuuming, as fleas can escape and reinfest the home.
- **Pets.** Shampoo pets with a flea-killing soap or treat them with a registered pesticide for flea control. Thoroughness in treating the pet is essential. In

fact it is recommended that the first treatment be made by a veterinarian. If the pets have bedding, wash or dry clean it thoroughly.

There are some other products (e.g. Advantage, Frontline, etc.) that act as systemics applied to the animals skin that work well when used correctly.

- **Pesticide Application Outdoors.** This is usually not necessary unless yard area is quite small or animals are in an outdoor kennel. If small outdoor areas are flea-ridden, apply a cyfluthrin or other pyrethroid product registered for controlling fleas outdoors.
- **Pesticide Usage Indoors.** A number of household sprays are registered for this use indoors (e.g. Permethrin and resmethrin aerosol sprays (not to be used on animals)). Use them according to label instructions. They are particularly useful for areas where vacuuming is impossible or difficult (for example, certain cracks and crevices). Use sprays as a supplement to the other indoor procedures mentioned and not as the sole means of flea control. Repeat spraying at 7- to 10-day intervals two to three times where allowed by label instructions.

Flea foggers also can be used effectively after treating pets and pets' sleeping quarters with registered material. If flea foggers are used, follow label directions. Leave the house, taking pets (including birds) with you for the prescribed amount of time. Cover and seal aquariums. Do this twice at 7- to 10-day intervals for mild infestations or three times for heavy infestations.

Perhaps the most long-term control available for home use is a combination spray of an adulticide such as resmethrin or permethrin in combination with a growth regulator such as methoprene. Use in concert with pet treatment. Again, remove or protect pets as described under flea bomb treatment. If you cannot locate these products at the usual market places, check with your veterinarian.

If you follow all of these steps and a flea problem persists, you may have a unique problem not easily remedied by the average homeowner. You may need the services of a professional pesticide applicator. Or, a community flea problem may exist that frustrates a good control program. Where such conditions exist, community cooperation is necessary.

By A.L. Antonelli, Extension Entomologist, WSU Puyallup.

Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

College of Agricultural, Human, and Natural Resource Sciences

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