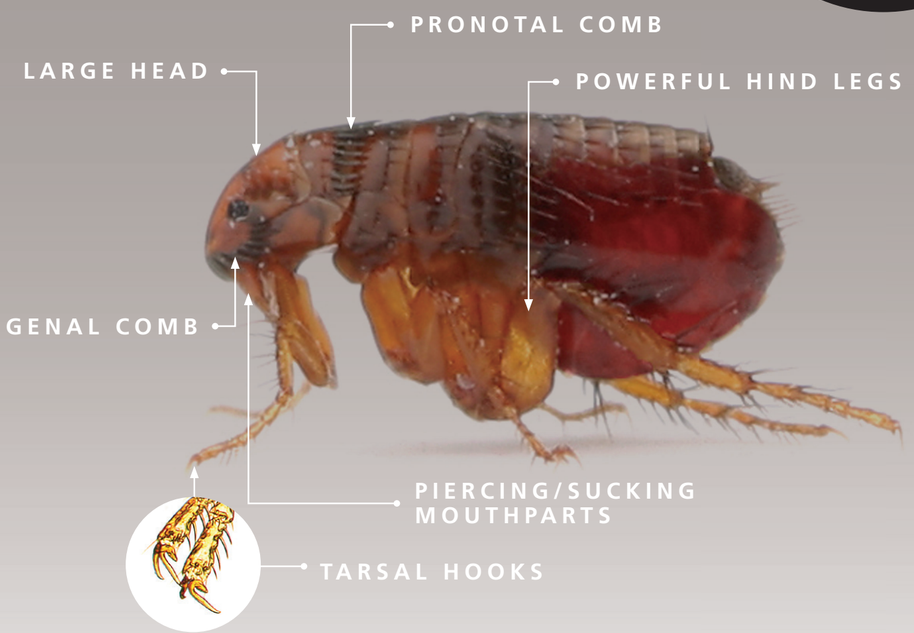
FLEAS

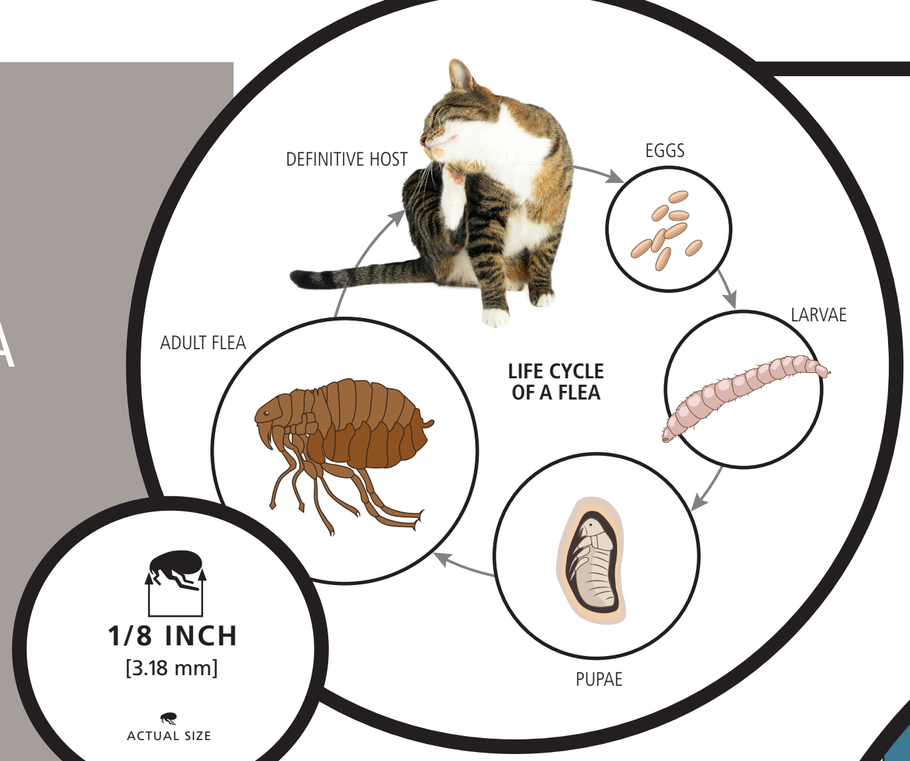
ORDER: SIPHONAPTERA
FAMILY: PULICIDAE

Although small in size, fleas have had a big impact on world history. As the primary vector of bubonic plague, the Oriental rat flea, *Xenopsylla cheopis*, was implicated in the death of nearly 25 million people during the Middle Ages, more than 30 percent of Europe's population at the time. Fortunately, the most common species encountered by PMPs – the cat flea – is usually more of a nuisance than a serious public health threat, causing irritation, itching and blood loss in both pets and humans. In some cases they can transmit parasites and pathogens.



DESCRIPTION

Fleas are small, laterally flattened, wingless insects measuring 1/8-inch in length. Key physical characteristics of these common blood-sucking ectoparasites include piercing/sucking mouthparts and powerful legs that allow them to jump up to 6 inches in the air. Generally black to reddish brown in color, the flea's body is covered with backward-projecting spines that assist them in moving between the hairs of the host animal. The dirty-white larvae are slender and resemble maggots. They are about twice the size of adults (1/4-inch).



LIFE CYCLE

Fleas undergo complete metamorphosis. After each blood meal, the female lays 11 to 46 eggs a day on the host animal and/or its bedding. Eggs hatch in about 10 days with the developing larvae feeding on the adult feces, which contain bits of dried blood. The larvae have three instar stages with the third instar pupating. Depending on environmental conditions, this can be a period of seven days to several months. When mature, they spin silken cocoons in which they pupate. Under ideal conditions, adult fleas can emerge from pupae after 5 days. The complete life cycle can take from 14 to 174 days.

▶ FACT

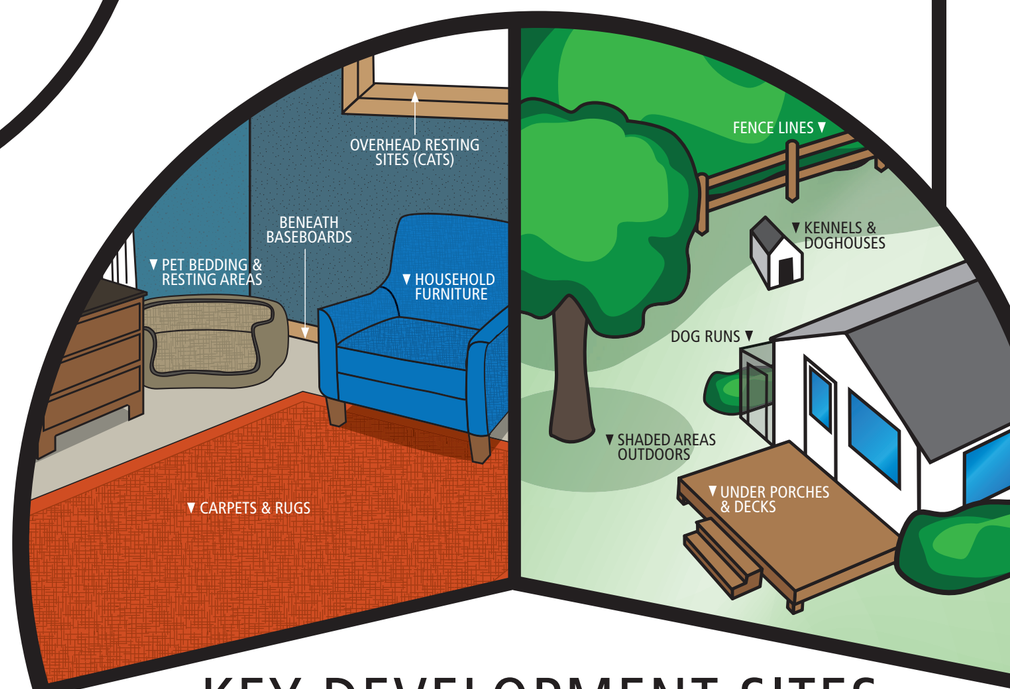
Flea hosts prefer shaded areas, meaning flea eggs are most likely to be deposited in these locations. Outdoors, fleas are frequently found under porches and decks. Conducive conditions for flea development are shaded areas where hosts regularly rest, and shaded and moist areas where fleas are protected from sunlight and desiccation.

CONTROL STRATEGIES

- Meticulous inspection
- Correct identification
- Treat pet (by homeowner)
- Thorough vacuuming
- Effective application of indoor insecticide
- Effective application of outdoor insecticide
- Include Insect Growth Regulator
- Conduct follow-up service

WHY USE AN IGR?

Insect Growth Regulators (IGRs) are ideally suited for fleas, interfering with the development of flea larvae, thus preventing populations of adult fleas. IGRs should be applied to the entire pet living area, both indoors and outdoors, to gain control of the population. IGRs interrupt the life cycle of fleas, resulting in longer lasting control.



KEY DEVELOPMENT SITES

- PET BEDDING & RESTING AREAS
- HOUSEHOLD FURNITURE
- CARPETS & RUGS
- BENEATH BASEBOARDS
- OVERHEAD RESTING SITES FREQUENTED BY CATS
- AREAS (E.G. CRAWL SPACES) THAT COULD HOUSE OTHER MAMMALS (E.G. RACCOONS)
- UNDER PORCHES & DECKS
- SHADED AREAS OUTDOORS
- DOG RUNS
- KENNELS & DOGHOUSES
- FENCE LINES