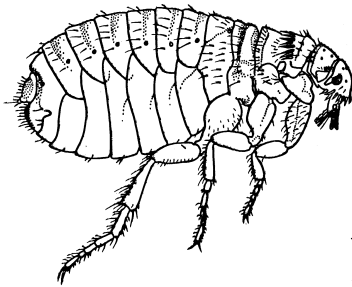


Fleas



Adult and larval flea.

Fleas are bloodsucking parasites of humans, livestock and pets. Only adult fleas feed on blood, which they obtain with their piercing/sucking mouthparts. Adult fleas blood feed on birds and mammals.

Adult fleas are laterally flattened, wingless insects. They have a small eye spot on the side of the head, and a row of

stout spines along the side of the head and the back of the thorax. Adult fleas travel rapidly by jumping, using their legs and a spring-like mechanism in the body. They are capable of spectacular leaps, covering distances up to one hundred times their body length.

Flea larvae feed on organic debris in bedding or sleeping areas, and in dust and lint debris in carpeting. The larvae are most common in areas where animals sleep because female fleas lay eggs in these areas. The eggs take about two weeks to hatch, depending on the temperature. Larval fleas look very different from the adults, having long body hairs, and appearing caterpillar or worm-like, without eyes or legs. Flea larvae spin a silken cocoon and pupate before transforming into adults. The period of a complete lifecycle from egg to egg is 3-4 weeks depending on food availability and temperature; the warmer the temperature, the faster the lifecycle.

Adult fleas are capable of living long periods without feeding. In a few instances adults have been known to live one or two years without a blood meal.

Fleas are responsible for a number of medical and veterinary problems. Flea bites themselves are irritating, and the affected area can become swollen or inflamed. Scratching can lead to secondary infection. Some flea species are known to transmit diseases, such as plague and

murine typhus, as well as parasites, like the cat tapeworm. Additionally, many pets develop allergic reactions to flea bites.

The most common flea found on household pets, such as cats and dogs, is the cat flea, *Xenopsylla cheopis*. The human flea, *Pulex irritans*, is rarely encountered in California.

Control of fleas involves killing adults on infested pets, and destroying eggs, larvae and adults in bedding, carpets, and furniture. This could involve treating both the pet and home simultaneously with insecticides, and frequent washing of bedding and keeping carpets as clean as possible. Infested furniture, such as couches or overstuffed chairs should be discarded. Adults can live for long periods of time without feeding, particularly at cold temperatures. It should be noted that there is little evidence that feeding pets yeast, vitamin B12 or garlic will prevent flea infestations. However, there are topical, systemic treatments for pets that are very effective against fleas.



Cat flea; photo by Joyce Gross, calphotos.berkeley.edu.