

Understanding Flea Biology and Flea Control

As an adult, the cat flea (*Ctenocephalides felis felis*), the cat flea, is an obligate parasite that is metabolically and reproductively bound to its host. This fact influences the approach in how to managing fleas: by applying products to and on pets, we attempt to control reproduction and “break the life cycle” rather than focusing on the environment.

Cat fleas begin feeding within minutes and start breeding soon after finding the preferred host. A female flea can begin laying eggs within 24 to 48 hours of jumping onto a host. In a few days, a female flea can lay 40 to 50 eggs/day.

Flea eggs roll off the host, and larvae typically hatch in 3 to 5 days. The larval stage is the most sensitive. Flea larvae require flea feces for nutrition, protection from direct sunlight, temperatures in the range of 45°F to 90°F, and relative humidity in the range of 50% to 85%. Many larvae do not survive to become adult fleas. The rate of flea development depends on the temperature. Development from eggs to fleas can take less than 3 weeks at 85°F and can take 7 to 12 weeks at 65°F. New fleas develop where pets or other flea hosts spend most of their time because this is where the most eggs and feces are deposited, and larvae require flea feces for nutrition.

Common hosts for *C. felis* include cats, dogs, opossums, raccoons, domestic rabbits, and hedgehogs. Squirrels and birds are not hosts for cat fleas. Feral cats, opossums, and raccoons move throughout neighborhoods. These “urban wildlife” hosts for the cat flea often seek shelter in covered, protected areas, and wherever they rest, they leave behind flea eggs and flea feces.

The only way to protect your pet from fleas is to do consistent, year-round flea prevention.