

Fleas	Bed Bugs	
Description		
Dark coloured with laterally compressed bodies; larvae are light coloured	Oval, flattened bodies, with the nymphs appearing straw coloured changing to reddish-brown with maturity	
Mobility		
Do not fly, but can hop or jump up to 18 cm (7 inches) vertically and 33 cm (13 inches) horizontally; their laterally compressed bodies allow for easy navigation through the hairs of their host	Do not fly or hop, but can move quickly over floors, walls, ceilings and other surfaces; experiences difficulty moving on smooth surfaces such as glass or polished metal	
Life Span		
From egg to adult can be completed in 14 – 28 days relative to favourable heat and humidity	Up to 9 months; favourable conditions shorten the life span, while unfavourable conditions, e.g. temperature below 13 C (55.4 F) or inaccessible food source, increases the life span as the insect enters a period of inactivity and awaits favourable conditions	
Eggs		
Whitish oval shape	Pearly white oval shape	
0.5 mm (1/32 of an inch)	1 mm (1/16 of an inch)	
Initially laid on animal's skin and easily falls off	Laid in secluded nooks and crannies and are 'glued' in position making them difficult to remove	
Hatches in 14 to 28 days (high humidity and temperature is favourable)	100% kill rate above 49 C (120 F) or below -17C (1 F) for 2 hours (weight/size/density will effect time variable) ; eggs are resistant to pesticides	
Larvae		
2-5 mm (1/8 to ¼ of an inch)	Nymph	
	5 stages of development (1 st instar through 5 th instar) during which the insect grows from 1.5 mm to 4.5 mm long (0.06 to 0.18 inches) and molts (sheds their skin) between each of the five stages;	
Feed on organic debris and on adult flea feces	Are able to take a blood meal immediately upon hatching	



Are blind and dislike strong light and moves deep into carpets and under furniture, preferring warm, dark and moist areas	Do not nest, but tend to congregate in habitual harbourages which are reclusive, and dark, favouring wood, fabric and paper surfaces, cracks and crevices; unusually close to the bed or close to where their food source tends to spend the most time, e.g. sofa, computer chair, etc.
Pupae	
Produce a protective silk-like sticky cocoon which collects debris and serves as camouflage	Emerge from hiding to feed every 3 to 7 days, stimulated by heat and carbon dioxide and must obtain a blood meal between each of the 5 stages of larvae development; if a blood meal is not available, capable of surviving for several months depending upon temperature
Only emerge from their cocoon when stimulated by physical pressure, carbon dioxide or heat and must obtain a blood meal within a few days or perish	
Reach adulthood in 5 – 10 days	Reach adulthood in as little as a month with favourable temperatures of 21 - 27 C (70 – 80 F) and 5 blood meals are consumed
Pre-emerged adults may survive up to 9 months within their cocoon	Adults may survive more than a year without feeding
Pre-emerged adults are resistant to insecticides	
Adult	
1.5 – 3.3 mm (1/16 – 1/8 of an inch) long	5.5 mm long (3/16 of an inch)
Attracted to light and emerges to feed	Remains reclusive, hiding in dark crevices and corners
Females begin egg production 2 days after first blood meal	Capable of mating after their 6 th blood meal
Lives up to 3 weeks	
Lays approximately 40 eggs per day	After a blood meal, a female may produce 5 – 20 eggs over 10 days and will lay 131 eggs in her life time
Health Risks	
Can cause anemia in young or debilitated animals	Prolonged bed bug bites may lead to anemia or infection from scratching bites
Can serve as vectors to spread the common tapeworm among dogs, cats and occasionally humans; diseases such as bubonic plague (from rodents to humans) and bartonellosis transmitted between cats and then passed to humans	While capable of carrying several human pathogens, no evidence of spreading these diseases to humans has been encountered

