

American Cockroach



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The American cockroach is not often a pest in houses. Although it can be an occasional pest in basements or ground floor apartments, it is most common in such institutions as restaurants, grocery stores, and hospitals. This largest of common cockroaches has even won first prize in the biggest cockroach contest on several occasions!

Identification

Cockroaches typically are flattened insects with long antennae and spiny legs. The American cockroach, *Periplaneta americana*, is dark chestnut brown and 1-1/2 to 2 inches long as an adult. The segment directly behind the head is bordered in yellow. Both sexes have full wings and frequently fly.

Cockroaches possess incomplete metamorphosis, meaning that there are three basic life stages—egg, nymph, and adult. The eggs are laid in dark brown, bean-shaped egg cases, each containing about 15 eggs. The female deposits the egg case in a protected place or attaches it to a surface soon after its formation. The nymphs of the American cockroach resemble the adults but are very light brown and smaller; newly hatched nymphs are only 1/4-inch long. They go through eight to twelve nymphal stages, becoming larger and darker and looking more and more like the adults at each stage.

Biology and Habits

The American cockroach lives mostly at or below ground level, inhabiting damp locations such as boiler rooms and sewers. In crowded cities or large institutions, they move from building to building through ductwork and pipes.

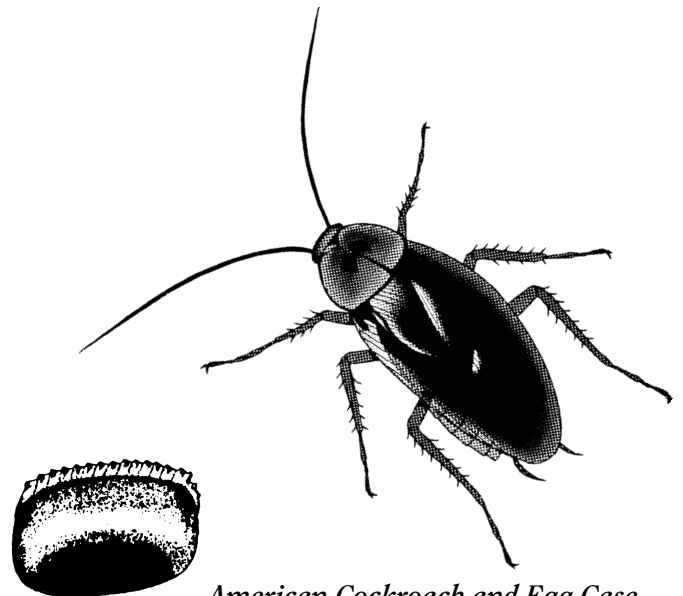
The American cockroach reproduces rather slowly, requiring up to a year to complete its

development from egg to adult. The life cycle of the American cockroach is seasonal in that the numbers of adult and nymphal cockroaches vary at different times of year. In the summer, the number of adult cockroaches reaches its peak. They reproduce and then die, leaving mostly nymphs in the population throughout the winter.

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Prevention Methods

Good housekeeping, plus moisture control, will go a long way toward eliminating the three primary needs of cockroaches—food, water, and hiding places or “harborages.” Garbage should be placed outside in cans with tight-fitting lids or in tightly sealed bags—loose garbage in paper bags or cardboard boxes provides food for cockroaches.



American Cockroach and Egg Case

Don't let too much refuse accumulate—piles of empty paper grocery bags or corrugated boxes provide excellent hiding places. Remedy damp conditions, such as plumbing leaks or wet basements. Apply a caulking compound to crevices indoors and repair cracks in the foundation and walls to lessen the chance that cockroaches can enter. Caulk openings where plumbing pipes pass through walls.

Floor drains are a common, but often overlooked, source of cockroach infestations. The drain may provide both a source of food, in the form of “drain slime,” and an entry point into buildings. To prevent cockroaches from entering through floor drains, cover the drain with screen. Cut a piece of wire screen to fit under the drain's sieve plate. Screen with a fine mesh is necessary to exclude small nymphs. Since American cockroaches often travel through heating ductwork, it may also be necessary to place fine-mesh screen over vents that open into rooms.

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Control Strategies

Pest Management Program. An integrated pest management program for the American cockroach combines monitoring with sticky traps,

nonchemical tactics (i.e., sanitation, repairs), and an initial treatment with a less toxic insecticide, followed by cockroach bait stations to maintain control at an acceptable level.

Sticky traps are often marketed as nontoxic cockroach control tools. They may provide a limited amount of control, but their greatest value is as a tool for monitoring. Cockroaches crossing the traps adhere to the glue and are unable to escape. Place them in areas where you have spotted cockroaches to help you decide where harborage areas are and where control methods should be applied.

Boric acid and diatomaceous earth are both labeled for indoor use against cockroaches. Use a bulb duster to apply the dust to wall voids and other areas where you have seen cockroaches. Be certain to follow label directions and to wear a dust mask.

After the initial control treatment, use bait stations to maintain control at an acceptable level. Bait stations are available in various types and sizes and with different active ingredients. They have the advantage of decreasing both the amount of insecticide used and the likelihood of exposure to it. Be certain to purchase the type for large cockroach species, since some bait stations have openings designed for smaller species of cockroaches. Place bait stations near cockroach harborages in corners and along edges. Be sure to use the number recommended in the package directions, usually two or three per 100 square feet. Never place bait stations on surfaces where an insecticide has been applied.

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