

Bug-Wise

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‘Large Roaches’: “These roaches are so big my cat’s scared of ‘em!” When homeowners use phrases like this to describe their roaches, you can be sure they have one of the species in the genus *Periplaneta*. We have three different species. Adults of all three species are over an inch long, and some American cockroaches reach two inches. These three species look a lot alike, and their biology and control is similar.

American Cockroach *Periplaneta americana*
Smoky Brown Cockroach *Periplaneta fuliginosa*
Brown Cockroach *Periplaneta brunnea*

These are often collectively referred to as the ‘large roaches’ to distinguish them from the much smaller, but more dreaded, German cockroaches. German cockroaches are more dreaded because they only live indoors, in our kitchens and bathrooms, and can develop to huge infestations if not controlled. The large roaches like to live near man but they don’t have to live inside. These roaches commonly breed around the outside of homes and commercial buildings and invade buildings from these outdoor breeding sites. Indoor breeding populations do occur, but are less common.

Large roaches are long-lived insects. It can take a year or more for them to develop from egg to adult, and adults live for many more months. All three species are omnivorous and feed on a wide range of organic matter, including plants, decaying plant material, pet food, pet feces, garbage, dead insects, and so on. They prefer warm, moist, protected areas, such as hollow trees, sewer lines, storm drains, masonry voids, crawl spaces, eaves of buildings, garages, storage sheds, warm moist attics, under siding, and other similar sites. Populations are generally heavier in the more southern areas, but heavy populations can occur anywhere suitable habitat is available. Heavy populations occur in most cities because sewers, storm drains, basements, crawl spaces, and masonry voids provide the moist, protected environments with ready food sources and because all that brick, asphalt and cement collects and stores heat.

Physical exclusion is the best means of keeping large roaches from invading your home. Make sure doors and windows seal tightly and seal cracks and crevices and around holes for plumbing and wiring. Keep ventilation vents properly screened and repaired, and generally make your home bug-tight. Such physical exclusion efforts also help keep out other insect invaders and conserve energy.

Sanitation is another key consideration. Large roaches feed on naturally-occurring organic matter, but they thrive especially well if they have access to man-made organic matter, things like: dirty garbage cans, pet food, sewage, pet feces, etc. When scientists grow large roaches for research purposes they often feed them dry dog food. This explains why there are often healthy infestations of these roaches around areas where pets are fed. Store pet food in bug-tight containers and do not allow uneaten food to sit out overnight. The bits of cheese and crumbs in an empty pizza box can feed a lot of cockroaches. Place garbage in sealable plastic bags and dispose frequently. Avoid placing outdoor garbage cans too near the house and periodically clean the insides to remove residues of food and filth. Avoid storing empty drink cans or bottles, and take other appropriate steps to limit accumulations of organic matter that roaches might eat.

It is also helpful to minimize accumulations of debris or stored items that can provide hiding places for roaches. Keep garages and other storage areas clean and uncluttered. Avoid stacking firewood, lumber, boxes or other items too near the house. Do not allow ivy or other vines to grow on the outside of the building; keep shrubbery pruned away from the house, and avoid excessive amounts of organic mulch in flower beds. Cleaning up debris and clutter is a key first step in attempting to control a heavy infestation of large roaches.

Even with good sanitation and exclusion, it is still common to have healthy populations of large roaches around the outsides of homes, especially if they are surrounded by heavy plant growth or other suitable harborages. In these situations, insecticides can help reduce populations.

Granular baits that are especially formulated for roach control are one of the easiest treatments to apply for large roaches. These baits are primarily intended for outdoor use or for application in basements, attics, storage rooms, wall voids, and other non-living areas. Niban (5% orthoboric acid) is one such product. Although it may not be available locally, it can be ordered by mail. Some companies also sell bait stations especially designed for large roaches—they can't get in the holes on the bait stations designed for German cockroaches. Raid Double Control Large Roach Baits (0.05% abamectin) and Combat Source Kill Large Roach Bait Stations (2% hydramethylnon) are two examples.

Insecticide sprays can also help in certain situations, but they are no substitute for good sanitation and exclusion. Many companies sell pre-mixed, ready-to-use insecticides that provide good short-term control of roaches along with some residual control. The following table lists some of these ready-to-use products. Most of these are labeled for use outdoors and indoors, as targeted 'crack and crevice' treatments. Read the product label for specific directions—before you start spraying.

Examples of Ready-to-use Insecticide Treatments for Control of Large Roaches

Active Ingredient	Brand Name (one example)
Bifenthrin (0.05%)	Ortho Home Defense Max
Cyfluthrin (0.1%)	Bayer Home Pest Control Indoor & Outdoor Insect Killer
Deltamethrin	Enforcer BugMax 365
Deltamethrin (0.02%)	Bonide Household Insect Control
Lambda-cyhalothrin (0.03%)	Spectracide Bug Stop Indoor Outdoor Insect Killer
Permethrin (0.25%)	Viper RTU
Tralomethrin (0.03%)	Schultz RTU Home Insect Killer
Permethrin (2%)	Bengal Roach Spray (Aerosol)

For heavier, or more wide-spread outdoor infestations you may prefer to use a treatment that you mix yourself and apply using a hand pump sprayer or a hose-end sprayer. Many companies sell products that are labeled for use as outdoor perimeter sprays. Read the label carefully and be sure you fully understand how these treatments must be applied. Many of these products are labeled for application to exterior surfaces of the house, such as the lower part of the exterior wall, around doors and windows and under eaves, as well as to a band of ground around the building. If the house has overlapping siding, remember that roaches like to hide in the resulting cracks.

Examples of Outdoor Perimeter Sprays for Control of Large Roaches

Active Ingredient	Brand Name (one example)
Cyfluthrin (2.5%)	Bayer Advanced Home Carpenter Ant & Termite Killer Plus
Cyfluthrin (0.75%)	Bayer Power Force Multi-Insect Killer
Esfenvalerate	Ortho Bug-B-Gon Multi-Purpose Insect Killer
Lambda-cyhalothrin	Spectracide Triazicide Soil & Turf Insect Killer
Permethrin (2.5%)	Enforcer Outdoor Insect Killer Concentrate
Permethrin (10%)	Hi-Yield Garden, Pet & Livestock Insect Control
Permethrin (38%)	Hi-Yield 38 Plus Turf, Termite & Ornamental Insect Control

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This information is for educational and preliminary planning purposes only. Brand names mentioned in this publication are used as examples only. No endorsement of these products is intended. Other appropriately labeled products containing similar active ingredients should provide similar levels of control. Always read and follow the insecticide label.