

Good Riddance to Roaches

A guide to home cockroach management

By **Becky Crouse**

Roaches commonly radiate out from areas providing a steady food source, such as kitchens, pantries, restaurants, cafeterias, and garbage collection or disposal areas. They can travel up elevator shafts and drains, through heating and air vents, in tiny cracks and crevices in walls and above false ceilings. In warm weather, they migrate between structures along the outsides of buildings and from dumpsters to nearby living units.

Roaches generally prefer carbohydrates to protein and fat. When hungry, they will eat almost anything containing carbohydrates, such as starch-based paints, wallpaper paste, envelope glue and bar soaps. Infestations often begin when egg cases are introduced in shipped materials, groceries, beverage cases, or used appliances, rugs and furniture.

Habitat

The Australian roach is more vegetarian than other species and common in greenhouses. The American roach enjoys moisture—it is common on ships, and in basements and sewers. The smokybrown roach also can be found in sewers, but primarily lives outdoors. Oriental roaches are moisture lovers, while brownbanded roaches prefer warm, dry environments, such as closet shelves and the upper stories of houses.

German roaches have the widest distribution of all domestic roaches, are often found in dead leaves and garbage piles, readily invade cartons, sacks and containers, and will enter empty or open bottles. They invade the indoors from outdoor habitats in the summer, and are usually found in basements and on first floors, having a preference for the warm area around furnaces and heating ducts. This is the most common roach found in food preparation areas, where the combination of food, moisture and warm temperatures mimic their native East Africa.

German roaches prefer squeezing into small cracks where their backs and undersides make contact with other surfaces. They are often found backed into cracks with their antennae and heads sticking out, picking up chemical signals from the air, which their behavior is more dependent upon than vision or sound. They become active 20 minutes to two hours before dark, and will only be active during daylight when populations are very high.

Prevention

Structural

- Caulk, weather-strip, and repair any holes larger than 1/16" around water pipes, baseboards, electrical fixtures, outlets, switches, doors and windows.
- Screen over windows, vents, floor and sink drains, and ducts.

- Keep trash, leaf piles and woodpiles away from the building.
- Fix leaky faucets and drains.
- Insulate pipes to prevent condensation.

Cultural

- Eliminate newspapers, magazines and paper bags.
- Inspect all food brought into the building.
- Store food in tightly sealed containers or in the refrigerator and put pet food away overnight.
- Clean all spills immediately, wipe all counters and tables after use, and keep the stove grease and food free.
- Rinse food and drink containers before disposal, empty trash and recycling frequently, use trash cans with tight-fitting lids and avoid placing them under sinks.
- Avoid soaking dishes overnight, place sponges and dishrags in an airtight container, and avoid overwatering plants.

Monitor

- Once a month, place two sticky traps per room where roaches tend to travel (where floor meets wall or countertop, inside cupboards, under sink, behind appliances) and leave them for 24 hours.

Control

- Boric acid is the most effective direct control method. Apply boric acid (a 99% formulation) to cracks and crevices where roaches hide – inside and behind cabinets and appliances, wall cavities, under the sink, etc... Roaches are killed in three to ten days.
- Dessicating dust, such as diatomaceous earth or silica gel can be blown into voids through small holes drilled into the walls. Be sure to choose a dust that is not mixed with pyrethrins. Dusts placed in wall voids or cracks and sealed can be effective for many years if they are kept dry.
- As with any pesticide, keep these products out of reach of children and only use them in locations where it will not come in contact with people or animals. Use these products with care, as they can cause respiratory irritation if inhaled, and always wear a dust mask and goggles and cover any electronic equipment that could suffer dust damage.

For more information, contact *Beyond Pesticides*.