

To Kill a Cockroach

By Barry Murray

You hate them. You know you do. There is perhaps no living thing on earth more reviled than the cockroach. These pesky insects can make a grown man or woman scream, tremble and run for cover. Frankly, they have no redeeming qualities and most people just want them eradicated.

Based on fossil evidence, cockroaches have lived on Earth for more than 300 million years. Their sizes vary considerably, with some species growing up to several inches long.

More than two-thirds of all living things on earth are insects, and many biologists consider insects to be one of the most successful groups of animals to ever inhabit this planet.

Cockroaches are one of the most adaptable and successful insect groups, having survived environmental shifts for hundreds of millions of years. There are approximately 4,000 – 7,500 species of cockroaches worldwide and approximately 60 species are found in the United States. They are in nearly every part of the world, in a wide range of habitats. Unfortunately, many of the biological characteristics that make them so successful, also make them one of the most difficult pests to manage.

Cockroaches, especially the German cockroach, are the most commonly encountered household insect pests in much of the United States.

However, only a few of the cockroach species found in the United States routinely enter and infest our dwellings. In addition to the German cockroach, the most common of these are: the American cockroach, the Oriental cockroach, the Smokey Brown cockroach, the Australian cockroach, the Florida Wood cockroach.

These six species represent the majority of all cockroach infestations in and around buildings. In some parts of the U.S., one species may be more prevalent than the others. Other species may infest homes or other buildings, but will generally be localized. Some will exist under unusual circumstances such as inhabiting ant, wasp, termite colony nests, caves, animal burrows, and even mines.

Because cockroaches contaminate food with their excrement, as well as emitting an unpleasant odor, these insects are considered by homeowners and entomologists to be among the worst household pests.

Many people develop allergies to cockroaches. Data from one study showed that 7.5% of 253 normal people showed allergic skin responses to extracts of cockroaches, while 28% of 114 allergic people were affected. Allergens present in the feces of the German

cockroach can become airborne along with normal house dust and inhaled. They can also be ingested with food.

Many of the environmental requirements of cockroaches (high humidity, warmth and food sources) can be found in a typical home. Cockroaches evolved as scavengers feeding off decaying plant materials, and they will readily feed on carbohydrates. But they will also feed on a variety of other foods, including paints, wallpaper pastes and book bindings. Homes also provide shelter and a multitude of warm and humid niches.

Prolific breeders, cockroaches can be very difficult to eradicate. A single female can produce more than 35,000 young each year. The lifecycle begins when a mature female cockroach produces an eggcase or ootheca. Females can carry an egg case with them for quite some time, dropping the case wherever it may fall (i.e., in pockets, briefcases, drawers).

This can lead to the rapid spread of these insects, because each ootheca may contain hundreds of eggs that hatch into small versions of the adults, called nymphs. Nymphs can be recognized by the absence of wings. Mature cockroach nymphs are almost as large as the adults, but require another molt to reach adulthood.

Some common roaches include:

German Roaches, which can cause infection and disease. Feeding on practically anything, these roaches can grow to 5/8" long and are fond of moist areas. One female can produce 35,000 offspring per year.

American Roaches, also known as Palmetto or Flying Water Bugs, is the largest of the species, growing up to 1.25" long. They are attracted to sweets such as grains, hair and soap and are found in home foundations, under wood and near pools.

Oriental Roaches, also referred to as the Water Bug, are considered the filthiest of the cockroach family and grow up to 1.25" long. They are usually found outdoors and migrate inside in cold weather.

Smokey Brown Roaches are related to American roaches, but are smaller. They feed on plant material and decaying matter and are found in wood shingle roofs and gutters.

Australian Roach are similar in appearance to American roaches, but rarely more than 1.25" long. Found primarily in warm humid environments in the southern United States, the females drop their egg capsules (which hold about 24 eggs) in cracks and crevices.

Florida Wood Roaches are small, not usually growing past 2/3" long. Especially troublesome during mating season in May and June, the Florida Wood Roach is most often found in firewood.

A cockroach prevention program should include the following elements:

Cut down on their food supply

- Vacuum or sweep the floor after every meal.
- Wash dishes in soapy, hot water to eliminate all traces of grease.

- Keep trash in a tight-lidded container.
- Keep compost as far from the house as possible. Cover each new "deposit" with a fresh layer of sand or soil.
- Store unused portions of chips, cereal, cookies, flour, sugar, rice and other bulk foods in tightly sealed plastic containers or large glass jars with screw-on lids.
- After a pet has eaten, remove their food bowl and sweep the floor.
- Don't walk through the house eating: contain crumbs in one room.
- Don't forget to clean crumbs from under appliances daily.

Dry up their water supply

- Roaches can go much longer without food than without water. To keep roaches away, keep them thirsty.
- Fix dripping faucets.
- Pour some Lysol into toilets at night to make the water undrinkable.
- Keep sink plugs over drains.
- Don't over water houseplants. Soggy soil is a delicious cockroach cocktail.

Keep them out!

- To prevent roaches from migrating in to your house, seal common roach entryways.
- Fill holes where pipes disappear into walls with copper wool or caulk.
- Caulk cracks around windows, eaves, doors, etc.
- Doors should have door sweeps so roaches can't crawl under them.
- On slab foundations, seal the weep holes with copper wool.
- On pier and beam foundations, make sure that all the vents are screened or sealed.

Cockroach control usually requires an ongoing treatment program. Many pest control companies require monthly or quarterly treatments to guarantee that roaches will not return. Because cockroaches can be so invasive and unhealthy, it is of the utmost importance that you follow the above steps and keep a regular pest control schedule.

Barry Murray, national spokesperson for Truly Nolen, has appeared in more than 500 television segments nationally as the "Jack Hanna of Bugs" and has nearly 15 years of

experience in the pest control industry. Barry brings an informative as well as unique and entertaining perspective to consumers' pest problems in the 21st Century.

