



Cockroaches

Cockroaches are despised by most and loved by few (namely entomologists). When we flip on a light and see them skittering across the kitchen or bathroom floor, we know we are in for an uphill battle. Many species can even take to the wing when disturbed.

All cockroaches place eggs in hardened purse-like cases called oothecae. Eggs hatch in a little over a month and under ideal conditions, most develop from egg to adult in about 6 months. Adult roaches live from 3 months to almost a year with ootheca production ongoing.

As with any pest, correct identification is the key to effective control. In Arizona, at least 20 species of roaches have been reported. Ten of these are native species and are rarely encountered in urban areas. Of the 10 introduced species, 3 are intermittently encountered, while the other seven are well established in urban centers around the state. These seven are the: American cockroach, Brown-banded cockroach, German cockroach, Field cockroach, Oriental cockroach, Surinam cockroach, and Turkestan cockroach. These roaches are readily distinguished based on size, color or pattern, wing development, and their usual habit.

The **American Cockroach** is also known as the sewer roach. It is the largest and most common in Arizona. Adults are reddish-brown, with a pair of dark-brown spots on the yellowish, shield-shaped section behind the head. Both sexes of adults are winged. These roaches can enter the home through drain traps from sewer systems. Closing drains can be effective in preventing entrance from sewer systems. Many municipalities institute pesticide applications in their sewer systems to control roach populations.

The **Brown-Banded Cockroach** is the only species likely to establish permanent residence within the home. Adults of this small (about ½ inch) roach are yellowish-brown with red-brown bands across the wings. The male is narrow with long wings. The female is pear-shaped bearing short, non-functional wings. It prefers warmer parts of the house and tends to establish residence behind pictures, on bookshelves, in furniture, in closets, especially in the bedroom. Sanitation and sealing openings to the outdoors or adjacent dwellings will limit their colonization efforts.

The **German Cockroach**, like the Brown-Banded Cockroach, is small (about ½ inch) and normally found indoors. They have short, black stripes worn on the shield directly behind the head. Both males and females can fly, but more often they are observed scurrying away when disturbed at night. The most likely place for a population is the kitchen where they have a ready supply of food and water. Rather than hiding in furniture or behind pictures, the German roach tends to hide in electric appliances making control difficult.

The **Field Cockroach** is similar in appearance to the German roach, being small (about ½ inch), grayish to olive-brown with two brown to black stripes on the shield-shaped section behind the head. It can be differentiated from the German roach by looking at the face: Field cockroaches have a black stripes between the eyes where German roaches do not. Field cockroaches are normally found outdoors in leaf litter or other plant debris. They are usually only found inside the home during early summer when it is hot and dry.

The **Oriental Cockroach** has a limited range in Arizona often being out competed by the American cockroach. It is about one inch long. Females are shiny black with extremely short, rounded, nonfunctional wings. Males are black with brown wings that do not reach the tip of the abdomen. Typically, these species like dark, damp areas such as water meter boxes and cellars.

The **Surinam Cockroach** is a more recent introduction to Arizona. This roach is about one inch long as an adult, has yellow-brownish wings that extend beyond the tip of the abdomen, and a solid black shield-shaped section behind the head that has a cream colored edge nearest the head. This is typically an outdoor roach and can inhabit greenhouses eating plant roots.

The **Turkestan Cockroach** was first found in Arizona in 1982 and is common in the Phoenix and Tucson areas. Adults are about one inch long. The male has long, yellowish-tan wings. The female has short, rounded wings with creamy stripes along the edges and a pear-shaped body. This roach is typically found outdoors, but when it reaches peak populations in June, can be found indoors.

Male roaches are attracted to lights on warm summer nights. If doors and/or windows are not well sealed, roaches can, and often do, gain entrance into dwellings. Indoor and outdoor sanitation practices around the home can discourage cockroaches. Clean kitchen scraps from visible areas as well as behind and inside appliances and cabinets. Compost piles should be as far away from the home as is practical. Woodpiles, potted plants, and leaf litter can also harbor roach populations. If roaches persist, use bait stations, traps, boric acid, or other products that can be strategically placed and have low toxicity to non-target organisms.

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