



## Cockroaches

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If you have ever lived in or visited Hawaii, you know that we have some of the biggest cockroaches in the world. In this article, we are going to learn more about these roaches and cockroaches in general. This article contains some interesting myths and facts about the mysterious cockroach.

**Myth:** All cockroaches are bad.

**Fact:** There are more than 3,500 different types of cockroaches, but only 69 species are found in the U.S. Only 5 species are commonly found in U.S. households and these pretty much make up your “bad guys.” They are the American, German, Oriental, Brown-banded and Smoky Brown Cockroaches.



American



German



Oriental



Brown-banded



Smoky brown

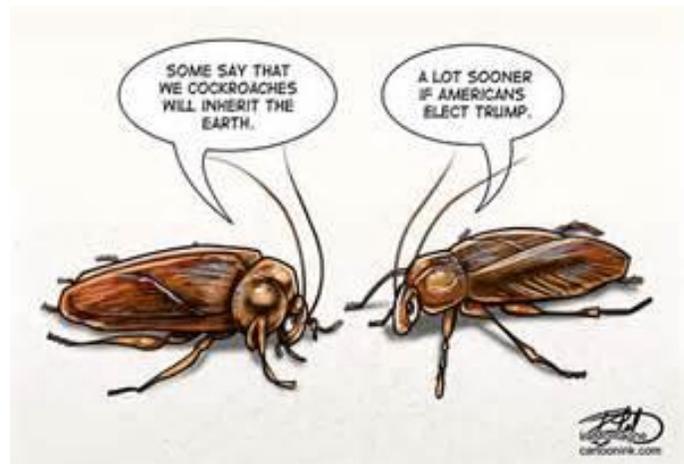


**Myth:** Cockroaches were on earth at the same time as the dinosaurs.

**Fact:** True. The cockroach is estimated to be at least 300 million years old so they actually pre-date most dinosaurs.

**Myth:** Cockroaches can withstand a nuclear explosion.

**Fact:** The myth that cockroaches will inherit the Earth in the event of nuclear warfare surfaced shortly after the United States dropped atomic bombs on Hiroshima and Nagasaki in 1945. Reports emerged that cockroaches were the razed Japanese city's only survivor.



**Myth:** Cockroaches cause allergies and can make people sick.

**Fact:** This is no myth, but rather a severe problem. Cockroaches produce proteins that some people can be sensitive to, particularly those with asthma. The trails of fecal matter and decaying molted exoskeletons that roaches leave behind also contribute to the allergens they produce. Roaches also carry bacteria, which can lead to the spread of disease as roaches crawl across food or other surfaces in the home.

**Myth:** Cockroaches can live without their heads.

**Fact:** This is not a myth, but a ghoulish fact. A cockroach body can survive without a head for up to a week. This is because a roach breathes through small holes in its body segments and has an open circulatory system. Since it doesn't need its head to breathe, it can survive without one for a short time. However, without a way to drink water, the roach eventually dies of dehydration.

**Myth:** All roaches can fly.

**Fact:** False. Only some species of the cockroach can fly. Others use their wings to stabilize themselves when they jump, which might appear as flight, but it's not. We all know that the American Cockroach (the big roach we have in Hawaii) can fly but only for short distances.

**Myth:** Roaches only invade dirty homes.

**Fact:** This is a myth. Roaches might enter clean homes, depending on ease of access to the water and food sources in the home. Dirtier homes just provide easier access, so it is more common. This is why it is important to not only keep your home clean, but also to ensure that cracks and points of entry for roaches and other insects are properly sealed. But let's face it – there is no way to keep roaches out of your house in Hawaii.

**Myth:** Roaches will eat anything.

**Fact:** This is 100 percent true. Roaches eat everything from plant matter to people food, dead skin cells, garbage, other roaches and even feces.

**Myth:** Roaches drink beer.

**Fact:** Roaches do seem to like alcoholic beverages, beer included. This is not a myth, though it's likely because of the sugars found in alcohol - not because roaches like to party.



**Cockroaches just love BEER**

**Myth:** Roaches can live for decades.

**Fact:** Most cockroaches can live anywhere between a few months and a couple of years, depending on the species. The big Hawaiian (American) roach can live up to 3 years.

**Myth:** Roaches can be found everywhere on Earth.

**Fact:** That's almost true. There are species of roaches on every continent except one. Roaches are adaptable and find ways to survive in most environments, just not in the Antarctica.



**Myth:** Cockroaches don't breathe oxygen.

**Fact:** This is false but some roaches can go up to 40 minutes without breathing, if necessary, and others can survive up to 30 minutes underwater. They do, however, breathe oxygen. Cockroaches breathe through a system of tubes attached to their spiracles. Spiracles are small valves along a cockroach's body that allows air into the trachea, much like gills do for a fish.

**Myth:** Cockroaches can swim.

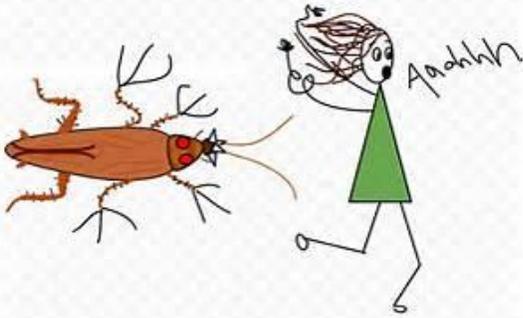
**Fact:** This is true. Most roaches can swim quite well. American cockroaches can literally come into a home from the sewer system, making their way through plumbing traps and swimming up into people's toilets.



Cockroach going for a swim

**Myth:** A roach can survive for days without eating.

**Fact:** This is true, but the news isn't all good for the cockroach. Most roaches can go up to a month without food because they are cold-blooded. However, they will die in a week if they do not have access to water.



**Myth:** Roaches can move really, really fast.

**Fact:** Indeed, they do move fast. A cockroach can move at speeds of more than three miles per hour, which is very fast given their size. Even a baby cockroach, called a nymph, can travel at close to those speeds.

**Myth:** Cockroaches are known to bite humans.

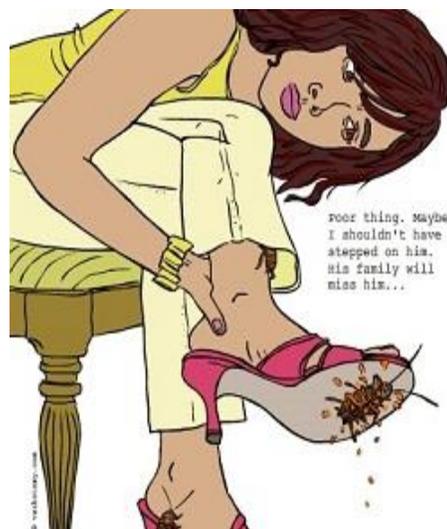
**Fact:** Cockroaches are omnivores and theoretically will bite anything that's edible including humans, but they prefer dead or immobile things. They are not known to be aggressive enough to attack us while we're awake. However, they might bite us if we do not move around much while we sleep, but that rarely happens.

**Myth:** Roaches don't sleep.

**Fact:** Mostly false - Most cockroach species have specific activity rhythms. They tend to "sleep" (or be inactive) during the day and start to become active at night to look for food, usually 3 or 4 hours after the lights go out. That is why we often see them running around during our midnight snack and bathroom runs.

**Myth:** Cockroaches have emotions and can feel pain.

**Fact:** This is False - There is no evidence that cockroaches can feel happy, angry, fear or pain. They simply react to environmental cues with reflexes but insect experts don't interpret those as emotions.



**Myth:** Cockroaches are known to fart.

**Fact:** As a matter of fact, they are one of the fartiest insects in the world. An American cockroach, common throughout Hawaii, gives off up to 35g of methane a year, which is more than 40 times of their average body weight.

**Myth:** Cockroaches don't have any blood.

**Fact:** They do have blood, but it's not in red color because they are cold blooded and don't use hemoglobin to carry oxygen. Most roaches have colorless blood except for the adult female cockroach, which is occasionally orange in color.

**Myth:** Cockroaches in Hawaii are bigger than other places.

**Fact:** Well, this is mostly true because the most common cockroach in the other 49 states is the German Cockroach but in Hawaii it is the American Cockroach that can grow up to 3 inches long. Thankfully, most of them are less than 2 inches long. Local people in Hawaii call them "B-52 Bombers" because they can fly and have been known to attack (fly at) humans.



The Cockroaches in Hawaii are BIG

**Myth:** Extreme hot or cold temperatures will kill cockroaches.

**Fact:** This is mostly true but they do have a physiological mechanism that allow them to survive the hot or cold if the temperatures are gradually raised or lowered.

**Myth:** Cockroaches have been known for crawling in the ears of kids and pets.

**Fact:** True. Doctors in some inner city areas report that one-half of the foreign objects they remove from children's ears are cockroaches. Roaches can crawl forward but they cannot go backwards.

**Myth:** Those BIG Hawaiian Cockroaches are hard to kill.

**Fact:** True – Check out the most popular local roach killing techniques:



**Spray um** - This is usually my last choice (except for that last option). Raid is both stinky and toxic to the dogs and kids. Most of the time the roach runs away unhurt laughing at you. I know people that have tried other sprays like air freshener, hairspray or WD40.... That just makes the roaches smell good, look good, and have less squeaks. None of these sprays work!



**Flush um** - A favorite of mine... Less violent, less gory, and really effective. About the only drawback flushing these guys has is that it wastes water. If you can time it right maybe you can only kill roaches when you need to go bathroom. This method does not actually kill the cockroach – but it does move the roach down the street to a neighbor's house.



**Stick um** - Glue traps (still known in Hawaii as the Hoy Hoy) work wonders with roaches. The only thing is that you gotta look at your little roach wax museum for days until it catches enough to throw away. I prefer those black cockroach bait traps that you don't actually see the roaches you catch.



**Whack um** - Rubbah Slippah time! Yes, this is the preferred method when it comes to getting rid of roaches. Ever seen a local person kill a roach with a slipper? They go nuts. Usually, the force used is about 20 times more than is typically needed. But of course, if you've ever tried to kill one of those B52 bombers, you know they are very strong. Sometimes the slipper is not enough to kill the roach but it slows it down long enough to give you time to stomp 'um till you are sure it is dead.



**Eat um** - This method is rarely used on purpose. Ever looked closely at your plate lunch and thought "I didn't order anything with legs?" It happens, and it's probably happened to you more times than you know.

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**Myth:** Cockroaches can speak (make noises).

**Fact:** While it may be true that the majority of cockroaches don't speak, there is one variety that's the exception. The Madagascar Hissing Cockroach holds the distinction of being the only insect that uses its air passageways to produce a sound. This works in much the same way as human vocal cords do. The large size and wingless nature of this variety of cockroach is the reason why it is often used as a token insect in movies. These roaches are over 3 inches long and weigh in at an impressive 24 grams.



Madagascar Hissing Cockroach

**Myth:** If a cockroach is flipped over on its back, it will die.

**Fact:** False. A healthy roach will eventually right itself, usually by using its wings to push off from the floor. The fact that you always see dead roaches lying on their backs doesn't mean that they died because they were on their backs. Rather, they ended up on their backs either because they were already dying and so had lost the ability to control their movements, or had died and were pushed over by the rigor mortis of their legs.

**Myth:** Roaches can flatten their bodies and crawl through a crack thinner than a dime.

**Fact:** This is a true statement.

**Myth:** Cockroaches cannot hear anything.

**Fact:** This is true but roaches use their antenna(s) to sense movement and sound. They are startled by the smallest air movements and can run for cover in less than 0.05 seconds.

**Myth:** The American Cockroach is anti-social.

**Fact:** This is mostly true. In contrast to other cockroach species, the American roach often lives alone rather than in large groups.

**Myth:** One female German cockroach can produce several thousand babies.

**Fact:** This is kind of true. German cockroaches die younger than any other North American roach species but in only 20 weeks of life, they have huge families. German cockroaches mature so fast that only a few weeks after hatching, they're ready to make babies of their own. When you take all the different generations into consideration, one female can be the matriarch of up to 35,000 roaches. This means that if one apartment gets them, they can rapidly spread through an entire building. Females can produce seven egg capsules in a lifetime, each holding as many as 48 eggs. The capsules stay attached to the mother until the eggs start to hatch.



**Myth:** Cockroaches mate tail end to tail end.

**Fact:** True - Female cockroaches use pheromones to attract mates, and the males practice courtship rituals, such as posturing. Cockroaches mate facing away from each other (see above picture on the left) with their genitalia in contact, and copulation can be prolonged. Female cockroaches are sometimes seen carrying egg cases on the end of their abdomens; the American cockroach holds about 30 to 40 long, thin eggs in a capsule called an ootheca. She drops the capsule prior to hatching and the eggs are hatched from the combined pressure of the hatchlings moving and gulping for air. The above picture on the right shows the life cycle for a cockroach starting with the ootheca capsule in the lower middle-right area of the picture. The hatchlings are initially bright white nymphs and continue inflating themselves with air, becoming harder and darker within about four hours. Development from eggs to adults takes three to four months. Most American cockroaches live about two years and the female may produce up to eight egg cases in a lifetime resulting in 300 to 400 offspring. Other species of cockroaches, however, can produce far more eggs.

**Myth:** The most common cockroach is the German.

**Fact:** True - The German Cockroach is the most common species of cockroach and is found all over the world.

**Myth:** Female cockroaches can be pregnant for life.

**Fact:** Well, this does not sound like much fun but some female cockroaches mate once and are pregnant for the rest of their lives.

**Myth:** Cockroach droppings look like black ground coffee.

**Fact:** True - Slightly larger than grains of sand and are easy to spot.

**Myth:** The largest cockroach is the Rhinoceros Cockroach.



The Giant Burrowing Cockroach (Also called the Rhinoceros Cockroach)

**Fact:** True – The Giant burrowing cockroach that is also called the rhinoceros cockroach is the heaviest cockroach in the world. They can weigh up to 40 grams. Oddly enough, this is one roach you may want to keep around. Unlike other cockroaches, the Rhinoceros cockroach doesn't have wings, isn't considered to be a pest, and plays an important role in its ecosystem by breaking down dead leaves. Some people have found that they make good pets. Found in Australia, these bugs can live for as long as 10 years and can grow to over 4 inches in length.

**Myth:** Cockroaches can walk or run up walls.

**Fact:** Cockroaches have six long, spiny legs that allow them to run quickly across almost any surface including walls and even upside down across the ceiling.

**Myth:** Cockroaches will grow back a missing leg.

**Fact:** Yes, this is true. So, if you accidentally pull off one leg, the cockroach can get by just fine with only five legs until the missing leg grows back.

**Myth:** Cockroaches are not good for our environment and the planet Earth.

**Fact:** This statement is totally false! Cockroaches are Mother Nature's recyclers. Their habit of eating leaves, branches and other vegetation helps to return plant matter back into the soil. In addition, cockroaches also serve as food for birds, lizards and larger insects out in the wild.

**Myth:** People actually eat cockroaches.

**Fact:** In China and many countries in Africa, cockroaches are deep fried and sold on sticks on the streets. There are also many indigenous tribes that eat cockroaches, live or cooked. So long as the cockroaches are on a diet of food and vegetables, they should be safe to eat, although most doctors still warn against the practice.



Cockroaches on sale in China

**Myth:** The writer of this article would just love to have a few cockroaches with his beer.

**Fact:** RIGHT!! If anybody has eaten cockroaches, let me know if they were good.

**Myth:** Readers of this article know more about cockroaches than 99% of the people in the world.

**Fact:** True. However, I recommend that you read it twice to be sure.