

# PestAware Advice Sheet Crawling with cockroaches?

#### British Pest Control Association 'Crawling with cockroaches?' pest awareness advice

BPCA is the trade association for the professional pest management sector. It's our role to help everyone understand the importance of proper pest control, provide pest prevention advice, and help you find an appropriately trained and trusted pest management company. Our PestAware guides are designed for home and business owners and are packed with practical advice and tips for getting to grips with British pest species.

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Got some uninvited dinner guests? Is the back of your fridge home to a colony of creepy crawlies? If you find your building crawling with cockroaches, you're in the right place.

Discovering there are cockroaches in your home or business is distressing and, due to their lifecycle, can be an uphill battle to control.

Whether you're thinking about doing some DIY cockroach pest control or you're looking to enlist the help of a professional pest management company, this guide is for you.



Cockroaches can be an uphill battle to control and are a serious public health pest.

Cockroaches (otherwise known as 'roaches') are common insects, with around 4,600 species worldwide.

About 30 cockroach species are associated with human habitats and five of those are well known as pests.

Two of the most common types of cockroach pest in the UK are the Oriental cockroach (Blatta orientalis) and the German cockroach (Blattella germanica). "Cockroaches pose a direct health risk to humans. They are vectors of disease, known to carry the organisms which cause food poisoning in humans and many other bacteria."

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## The dangers: why we control cockroaches

#### Disease

Cockroaches pose a direct health risk to humans. They are vectors of disease, known to carry the organisms which cause food poisoning in humans and many other bacteria, such as salmonella, staphylococcus and streptococcus.

Cockroaches move from sewers, drains into buildings and human habitats. This means that when they're in your building, foraging for food and water, they will contaminate anything they come into contact with; food, utensils, and preparation surfaces.

They disgorge portions of their partially digested food at intervals and drop faeces along the way.

#### Reputation

Nothing can ruin the reputation of a business faster than news of a cockroach infestation.

All businesses are at risk, but industries handling food and drink, and operating within



Cockroaches can spread many nasty diseases and bacteria to humans, such as salmonella, staphylococcus and streptococcus.

highly regulated environments, may face a greater danger from exposure to cockroaches.

If clients and customers spot evidence of a cockroach infestation on the premises you manage, they are likely to complain and request a refund.

Negative reviews of businesses or products are easily



shared and viewed online, particularly on social media.

And aside from the reputational costs, there are also fines for businesses found to have a pest problem. These usually come at a significant expense and repeat offenders are in danger of facing legal action.



Negative reviews can undermine a company's reputation and lead to financial loss.

Environmental Health Officers can issue enforcement notices to business owners who don't have adequate pest management procedures in place.

#### Types of cockroach in the UK

There are around 4,600 different species of cockroaches worldwide and there are a few cockroach species that we may come across in the UK.

Two of the most common types are the German cockroach and Oriental cockroach.

**DID YOU KNOW?** A fear of cockroaches is known as Katsaridaphobia.

You may, on occasion, also come across the American cockroach and Brown-banded cockroach.

American cockroaches are the larger of these four at around 20-30mm in length. They mostly live on trees and are not always found in homes and businesses in the UK.

When they are, they will usually be found in dark, humid and undisturbed environments, such as basements. don't like our British weather (who does?) so they do live within buildings.

Oriental cockroaches are much hardier than the German and, in the summer months, you may even see them outdoors around bin areas where they forage. However, this is very uncommon.

ORIENTAI





Far smaller is the brownbanded cockroach, at just 10-15mm in length.

They favour warm, humid environments - ceilings, attics, inside and around appliance motors.

Oriental and German cockroaches are more common and are more likely to be found in UK homes and businesses.

When we think of a cockroach in the UK, the image that springs to mind is usually the Oriental cockroach.

## Habitat: how cockroaches choose a home

Generally, as a rule, cockroaches

The German cockroach favours higher temperatures and humidities, with a common nickname for it being the "steam fly".

GERMAN

You're likely to find them behind appliances where you have warm motors, such as your oven or fridge.

Oriental cockroaches will thrive in cool, damp areas such as basements and drains.

Both these species of cockroach can often be found around the heating ducts and boiler rooms of large, centrally heated buildings.

You should also look for cockroaches around pipes, stoves, and sinks, especially in





## The tell-tale signs cockroaches are about

Although the obvious sign of a cockroach infestation is spotting a live one, cockroaches are nocturnal, so it's unlikely you'll see them during the day.

Instead, you'll need to check for signs of their presence.

These can include:

- Droppings
- Egg (ootheca) cases
- Shed skins
- Obnoxious odour (large infestations)
- Damage to food or packaging.

humid areas like bathrooms and around laundry appliances.

Areas with food, water and dark spaces to hide are ideal environments for cockroaches to live.

#### Cockroach biology and behaviour

#### Appearance

Cockroaches are distinguished by their very long whip-like antennae, flat oval bodies and rapid, jerky walk. The adult German cockroach is a light yellowy/brown and is 10 to 15mm long, with two distinguishable dark stripes on its thorax.

The Oriental cockroach is shiny black, brown or mahogany and measures around 20 to 24mm long.

Immature stages of cockroach, called nymphs, look exactly like adults, just on a smaller scale.

It's important to know the difference between these types of cockroach as they tend to live in slightly different environments.

#### Cockroach mating and lifespan

Cockroaches undergo something called incomplete metamorphosis. This takes place in three stages: egg, nymph (immature), and adult.

What came first, the cockroach or the egg? For the purposes of this article, let's go with the cockroach.

As adults, German cockroaches can live anywhere between 100 and 200 days. A female cockroach will produce an egg case, called an ootheca.

While a German cockroach will carry the egg case until the nymphs are ready to hatch, the Oriental cockroach deposits its 13mm long egg capsule, way before it is time for it to hatch, in suitable dark crevices.

The average gestation period for the German cockroach is 28 days. The Oriental cockroach incubation period is around two months. Once the eggs are developed within that ootheca, it will then release them and they will emerge as nymphs.

For the German cockroach, it's usually around 30 or more nymphs per ootheca and around 16-18 nymphs for the Oriental cockroach. A nymph is an immature version of an adult cockroach, similar in appearance but much smaller.

They will go through five or six stages of casting off their skin so that they can grow, from nymphs to maturity. This takes about six to 12 months for the Oriental cockroach and six to 12 weeks for the German cockroach.

#### Surviving and thriving: other characteristics of cockroaches

Cockroaches are considered among the most primitive insects on the planet. Fossil evidence suggests that even cavemen had to deal with cockroach infestations.

The idea that cockroaches can



survive a nuclear explosion is actually a myth. It was a theory that first surfaced following the bombing of Hiroshima and Nagasaki in 1945, but was put to rest by TV's MythBusters.

They discovered that although cockroaches were able to survive radiation doses 10 times higher than those that would be lethal to humans, they can't actually survive a nuclear explosion as none of the crawling insects survived radiation levels of 100,000 rads.

#### **DID YOU KNOW?**

Cockroaches are super fast! They can run 1.5 meters per second, the equivalent of a human running at around 200 miles per hour.

They can, however, live for at least a week without their heads! Unlike us, they don't need their mouths to breathe: instead, they use spiracles (tiny holes) in their body to inhale and transport oxygen.

Like rats and mice, cockroaches are able to fit through tiny gaps, sometimes as small as a quarter of their body size. They flatten their incredible exoskeletons in order to do this.

#### What do cockroaches eat?

Cockroaches are not fussy eaters; they are omnivores which means they will feed on almost anything, including refuse, faecal matter and even other cockroaches.

This cannibalistic tendency is thought to be a way of regulating population size by the cockroaches themselves.

If other food is scarce and

cockroach numbers high, then these insects will eat each other. They do require access to water and will be generally found in inaccessible harbourages (nooks and crannies, to use their technical term), close to water and food.

Cockroaches can survive for several months without food, but will not live for more than a few days without water.

The difference between cockroaches and beetles

Although many beetles have a similar oval body shape to cockroaches, they're missing the characteristic antennae.

Also, most of the more common beetle species in the UK are much smaller than the German and Oriental cockroaches.

Ground beetles are similar in size to the Oriental cockroach, however they lack antennae and most have an iridescent/luminous quality to them.

#### Do cockroaches bite?

It's incredibly rare for cockroaches to bite humans.

Although they're omnivorous and have been known to eat human



Smoky brown cockroach showing its wings. Image by Toby Hudson (Wikimedia Commons)

#### Can cockroaches fly?

While most cockroaches have wings, many of them don't fly. Some fall with style. Others, like the Oriental cockroach, have wings that are too short to be much use.

The ability to fly for many cockroaches relies on climate - higher temperatures and humidity encourages flight.

However cockroaches tend to be weak fliers and unsteady in the air, preferring to run.

flesh, there are very few reported cases of a cockroach biting a person.

#### How to prevent cockroaches

As we always say at BPCA: prevention is better than cure.

If you own a business, particularly





a food business, you should employ a professional pest management company to carry out a proactive pest control strategy.

Here are a few prevention tips for securing your property:

- Keep areas clean and tidy - clean all surfaces thoroughly to remove any food residue and sweep up any discarded food debris
- Try not to leave dirty dishes and utensils in the sink
- Keep bins covered, clean, and emptied regularly
- Areas such as the top of or beneath your refrigerator are warm and food collects there, attracting cockroaches, so clean these areas regularly
- Proofing and repair seal gaps around doors, windows and where utility lines enter, to prevent entry
- If possible, repair any leaks beneath the sink and on the sink top, cutting off a potential water source
- If you buy any second hand kitchen utensils like fridges and freezers, make sure you give them a check over and a good clean to ensure you have not transported any little hitchhikers.

## How to get rid of cockroaches

Control of cockroaches is seldom easy because of the difficulty in getting the insecticide to the insect.

Cockroaches are hardwired to survive.

They are adaptable, highly mobile and their lifecycle makes cockroach control an uphill task for the untrained individual. BPCA would always recommend contacting a professional pest management company to help with your cockroach infestation.

#### **Before treatment**

Before you do anything please consider the following steps:

#### **DIY cockroach control**

For any cockroach infestation, we would always recommend contacting a professional pest control company who is a member of the BPCA.

They are trained in cockroach



#### Hygiene

A thorough clean of the area should take place prior to the insecticidal treatment. Pay particular attention to removing food and water sources and hiding places.

#### Fix it up

Unsound surfaces (e.g. broken tiles) should be made good and any possible cockroach harbourage sealed with plaster, mastic or other suitable fillers.

#### Sticky traps

The use of sticky traps is not recommended for controlling cockroaches but should be used for monitoring purposes.

These will tell you if you have an infestation and how bad that infestation is, but they won't solve the pest problem. control and will have access to a range of professional use insecticides which are not available to the public.

However, if you decide to carry out the work yourself then you can buy amateur insecticide products.

The success of insecticidal treatments depends on what insecticides are chosen,

#### REMEMBER ALWAYS FOLLOW THE LABEL INSTRUCTIONS

and how thorough the application is. Remember to pay

NS Remember to pay particular attention to cracks and crevices where eggs and nymphs may be found.

The insecticide, ideally, should have sufficient persistence to kill the nymphs hatching later from unhatched egg capsules.



When using any insecticide, make sure it is administered in a safe and secure manner, and that products are kept out of reach of children and pets.

#### WARNING: When using insecticides always follow the instructions on the label.

#### **Professional cockroach** pest control

Any pest management professional will take a systematic, integrated approach to cockroach control, starting with a thorough survey of your premises. This helps them determine any potential harbourages (shelter) and assess the level of the infestation.

They will then decide on the appropriate control treatment.

Most treatments will rely on the

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MEMBER

#### "A BPCA member company will be able to treat infestations quickly and safely."

use of bait treatments, such as gel or powders. Residual spray formulations are less used following the introduction of baits.

They can still be useful to apply to areas on the periphery of infestations so that emigrating individuals may be controlled.

A professional may use dust formulations if the infestation includes generally inaccessible areas, such as ducting systems and dead spaces.

#### Finding a pest controller to get rid of cockroaches

A BPCA member company will be able to treat infestations quickly and safely.

They can help minimise pest activity with a range of techniques and have the technical knowledge and experience to apply products in an efficient manner, while minimising risk to the environment and non target species.

All BPCA members employ gualified technicians who frequently update their knowledge.

#### **BPCA** members all have:

- The correct insurances
- Trained and gualified technicians
- Been audited to the British Standard in pest management EN 16636
- To follow BPCA's Codes of Best Practice.

## **BE PROTECTED. PROFESSIONALLY.** How do you know your pest management contractor is fit for the fight?

Association is the trade association for professional pest management companies in the UK.

By choosing an audited BPCA member you can be assured that the services you receive are from a trained and trusted company that meets our strict membership criteria.

British Pest Control Our member companies meet or exceed all legal and 'due diligence' requirements and comply with the most current legislation.

> Stay protected. Always look for the logo.

No other trade body gives you this security.

Make sure you stay safe.

Select a BPCA member.



#### Find a pest controller

A BPCA member company will be able to treat infestations quickly and safely.

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You can find a BPCA member, local to you, using our Find a pest controller tool.

bpca.org.uk/find 01332 294 288