

THE MGK GUIDE TO

COCKROACHES



PREVENT. CONTROL. ELIMINATE.

OVERVIEW

Water, food and shelter are all cockroaches need in order to thrive. MGK, the proven expert in pest management, has over 115 years of experience developing innovative solutions. We are highly knowledgeable about cockroach species, behaviors and habitats, as well as the most effective methods of prevention, control and elimination—all three of which are critical.

This guide is designed to provide helpful information on cockroaches, as well as identification, inspection and treatment practices. With these tips, you can help customers improve sanitation and control cockroach infestations in their facilities.





IDENTIFYING COCKROACHES

Brown-Banded



UP TO
1/2
INCHES

Brown-banded cockroaches have lighter brown horizontal bands across their body. The female's wings do not cover the abdomen, while the male's wings do.

German



UP TO
5/8
INCHES

The German cockroach, which is only found indoors, is best identified by its small size and by two dark parallel lines running from the back of the head to the wings.

Oriental



UP TO
1 1/4
INCHES

The oriental cockroach is dark brown to black in color. The male's wings cover 3/4 of the abdomen; the female's wings are extremely short and underdeveloped. The wings are not functional.

Smokybrown



UP TO
1 1/4
INCHES

Smokybrown cockroach adults are dark brown to black in color. The adult cockroaches' wings extend past the abdomen in males and females and are functional.

American



UP TO
2
INCHES

The American cockroach is the largest in size of these common cockroach species. They are often found outdoors but can infest indoor areas as well. They are frequently found in sewers and can migrate indoors through plumbing and other small openings.

BAIT SIZE AND PLACEMENT

Don't put out bait placements larger than 4mm. It is more effective to place many smaller (pea size or 3mm) beads of bait. Try not to make placements too small (less than 1mm) or they will dry out quickly. Follow label instructions for the recommended number of bait placements based on the population's size.

BAIT WEIGHT

Approximate weight per bead diameter

4mm bead = 0.032 grams 2mm bead = 0.016 grams
3mm bead = 0.025 grams 1mm bead = 0.008 grams

BEAD SIZES

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1mm 2mm 3mm 4mm

APPLICATION RATES*

Application type	Grams of bait per 100 sq. ft.
Maintenance	0.25 - 0.50 grams
Light	1 - 3 grams
Heavy or cleanout	6 - 12 grams

**Example rates for Vendetta Nitro. Always follow labeled application rates.*



COMMON COCKROACH SPECIES

- American Cockroach
- Brown-Banded Cockroach
- German Cockroach
- Oriental Cockroach
- Smokybrown Cockroach

BEST PRACTICES

Inspection & Monitoring



LOOK FOR SANITATION ISSUES

Use a flashlight in every inspection to look under and behind tables, equipment, and storage items. A good pair of kneepads and a telescoping inspection mirror will allow you to view hard-to-reach areas.



TAKE PICTURES

Use a mobile device and selfie stick to take photos of areas that are difficult to access, such as above refrigerators or in ceiling tiles, especially if you don't have a ladder.



EXAMINE GLUE TRAPS

- Move a glue trap around to identify the direction a cockroach was moving, which will help you find the harborage area.
- Check the life stages captured on a glue trap. A lot of small instars (adolescent cockroaches) can indicate a recent hatch or close proximity to the harborage area. If the glue trap has captured cockroaches in multiple life stages—especially adult males—it indicates under-baiting.
- Date glue traps so you will know how long they have been in use.

Sanitation



REMOVE FOOD SOURCES

To spur cockroaches to eat the bait, eliminate competing food sources in the area.



USE A VACUUM

- Vacuuming is a quick way to reduce a cockroach population and increase the effectiveness of baits and residuals.
- Determine the efficacy of the treatment by returning to vacuum up dead cockroaches; the more dead cockroaches there are, the more likely the control method is working.

Treatment



TARGET HARBORAGE

The majority of a cockroach population is younger nymphs, which are more likely to stay near the harborage area. Place bait as close to the harborage area as possible so the nymphs are more likely to find and eat it.



STAY LOW

Cockroaches are found in many different places, so sometimes you need to get on your hands and knees for optimal bait placement. Some areas may require you to apply bait behind or underneath appliances or furniture.



ROTATE & TEST BAITS

Minimize bait aversion by rotating baits with a different matrix. If the cockroach population is not getting under control, try placing two or three different types of bait on a business card close to the harborage area. If all baits are gone after 24 hours, under-baiting is likely the problem. If only one bait has been eaten, the cause could be bait aversion.



USE MULTIPLE METHODS

For best results, employ different control methods:

- Try spot treatment using a microcapped or nonrepellent residual and/or Insect Growth Regulator (IGR). Add a synergist to help combat resistance.
- Dust in wall voids, behind switch plates and socket covers.
- Use an Ultra Low Volume (ULV) treatment in drop ceilings or Actisol to flush harborage areas if a cleanout is necessary.
- Seal any noticeable cracks and crevices with caulk (after informing the customer).

BEST PRACTICES

Customer Communication



REPLACE CARDBOARD

Recommend that your customer replace all cardboard storage with plastic or metal containers, as cockroaches frequently hide in corrugated cardboard boxes.



PRIORITIZE TASKS

Give your customer one or two specific and manageable tasks that are the most critical at that time. For example, remind the customer to do the dishes and seal all food packages every night.

Business & Product Tips



STORE BAIT CAREFULLY

Be mindful not to contaminate the bait when it is in storage; know the age of the bait and avoid extreme heat, smoke, exhaust, cleaners, paint and other volatiles.



ALLOCATE RESOURCES FOR CLEANOUTS

Initial cleanouts are a significant investment, as they require a great deal of time and effort and may require more frequent follow-up treatments to control the cockroach population. A PMP should plan accordingly for cleanouts and additional services.



TIPS & TRICKS

Here are some helpful pointers to use as a reference while on the job.

BAIT CREVICES

Apply bait to cracks and crevices, depositing enough to kill the existing cockroaches.

CHECK BAIT

Make sure cockroaches are eating the bait. If they aren't, try a different bait with a new food matrix, and rotate baits quarterly to combat bait aversion.

PLACE BAIT NEARBY

Put bait near or inside cockroach harborages. Cockroaches will rarely travel long distances if food is only inches away.

CHOOSE LOCATIONS

Don't place bait where pesticide has been applied, or anywhere bait might be washed away or mopped up.

CLEAN UP

Remove any food residue, as it can draw cockroaches away from bait placements.

REMOVE OLD BAIT

Use a putty knife or blade to remove old bait, as its presence could trigger bait aversion.

BAIT AVERSION

Don't exclusively use gel baits for cockroach control. Including other methods of control helps limit bait aversion and reduces cockroach populations.

PLACE ENOUGH BAIT

Apply enough bait for the population. Under-baiting will necessitate re-applying frequently without gaining control of the infestation.

READ LABEL

Read and follow the label to reduce errors and maximize the effectiveness of the bait.

AVOID FOOD SURFACES

Never apply bait to food or food-handling surfaces.



The American cockroach can live for up to one year.

The female American cockroach will produce up to 90 egg cases in her lifetime.



WHAT IS A HARBORAGE?

A LOCATION, TYPICALLY WARM AND DAMP, WHERE COCKROACHES SEEK SHELTER AND REPRODUCE.



92%

OF ALL COCKROACHES ARE RARELY SEEN OUTSIDE OF THE HARBORAGE AND EXIST AS A HIDDEN DANGER.



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