

*Manchester*  
**MOTHMEN**

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# The Ultimate Team-Up: **THE MANCHESTER MOTHMEN** &... You!

**HOW TO WIN THE WAR AGAINST CLOTHES MOTHS**



# INTRO

Manchester Mothmen, assemble! That means you too, 'cos you're one of us now. In fact, you're taking charge on this mission, Captain! You're already well on your way to defeating these winged invaders. We're proud to be your crew, so we've made you a nifty little report to begin the battle.



# CHAPTER 1

## WHY SHOULD YOU GET RID OF CLOTHES MOTHS?

Because they're nasty.  
You've already got the traps,  
so you know that. Next!



# CHAPTER 2

## KNOW YOUR ENEMY

To defeat an enemy, you must know them.  
Here are the 3 most important facts:

- 1.** There are over 2500 species of moths in the UK, but only a few damage clothing. Of these, there are 2 main species that are consistently identified as 'clothes moths'.
- 2.** The main species of clothes moths hate light. If you're seeing moths flying around in the open, they're probably not clothes moths. If you've caught them crawling around in dark areas, however, they're almost certainly clothes moths.
- 3.** The moths themselves do not eat your clothes: their larvae do. Our traps stop the production of larvae by interrupting the breeding cycle. That's the polite way of saying our traps exclusively kill male moths to prevent them from getting it on with the ladies. With no fun to be had, the female moths will fly elsewhere in search of a new fling. Several new flings, to be precise, but that's somebody else's problem!



# CLOTHES MOTHS

## The Rogues Gallery

### 1. The Common Clothes Moth (*Tineola bisselliella*, also known as the Webbing Clothes Moth)

It's always nice when a villain's name tells you exactly what they're about. The Joker is a clown, the Riddler forces you to solve riddles, and the Common Clothes Moth is a Clothes Moth that's extremely rare.

Just kidding! Yes, they're very common, and this is the species of clothes moth that is most responsible for infestations.



They are between 1-2cm long, and look like they've been dipped in gold. These are crawlers, not fliers, and you'll most often find them in dark areas such as wardrobes. They can also be found hiding near the edges of rugs and carpets.

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### 2. The Case-bearing Clothes Moth (*Tinea Pellionella*)

The larvae of this moth species are just as fond of devouring carpets and rugs as they are clothes. They are around the same size as their more famous sibling above, but are duller in colour and usually have a few dark spots, along with red tufts of hair on their heads.

Their inferiority complex has led them to overcompensate, and these little beasts can end up being very destructive. When



they turn from larvae to adult moths, they leave behind a case which looks like a grain of rice. Careful, though, that's not Basmati---it's Basmothi! Your cringing only increases our strength, Captain.



# CLOTHES MOTHS

## The Rogues Gallery

### 3. The Pale-Backed Clothes Moth (*Monopis crocicapitella*)



This is a much newer species than any others mentioned thus far. For this reason, it's also the rarest, but is slowly earning its stripe. Get it? Because earning one's stripes is an idiom for achieving status through hard work? And this moth has a single stripe on its back? Do you get it? Do you get our joke about the stripe? Captain?



# PANTRY MOTHS

Some invasive species of moth have larvae that feed on food rather than clothes, and it's possible you may have these instead of clothes moths. The three most common species of pantry moths are:



## 4. The Indianmeal Moth (*Plodia interpunctella*)

This is, by far, the most common kind of pantry moth. It's often just straight up called 'the pantry moth' because of this, but it's not the only kind. They are between 8-10mm in length, and have a very distinct appearance due to the two contrasting bands of colours on their coat.

## 5. The Mediterranean Flour Moth (*Ephestia kuehniella*)

It's grey with black lines zigzagging across its body. While it does prefer flour, it can infest other foodstuffs like cereals and grain.



## 6. The Almond Moth (*Cadra cautella*)

This is a wolf in sheep's clothing. They'd like you to think they only eat almonds, but the larvae devour a bunch of other foods including flour and wheat products. They also eat each other. Yes, they're cannibals, so that's nice.



# CLOTHES MOTHS

## Lesser Villains

If your moths aren't any of the above, you may have a case of omnivorous opportunists. These moths don't fit neatly into the clothes/pantry moth dichotomy, and our pheromones won't attract them:



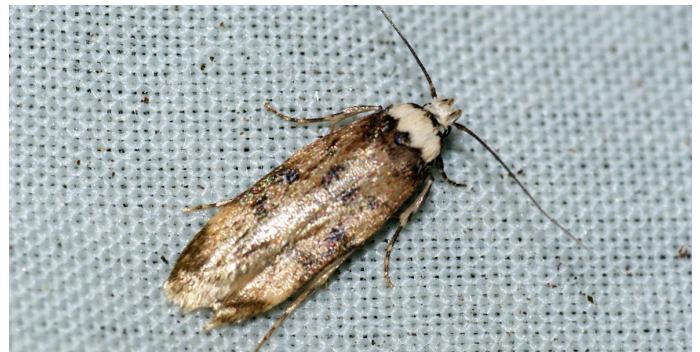
### 7. The Brown House Moth (*Hofmannophila pseudospretella*)

This small moth is usually under an inch long, and has a dull brown coat with black dots spread throughout. While it can feed on clothing, it prefers foodstuff.

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### 8. The White-Shouldered House Moth (*Endrosis sarcitrella*)

It's a sub species of the Brown House Moth, but is dressed to impress. While its moniker is far from creative, at least there's no mistaking it when you see one.





# CHAPTER 3

## HOW TO DEFEAT CLOTHES MOTHS

- 1.** Open our traps up, peel off the protective paper (that part's important), and hang them up in your wardrobes or near damaged carpet. If you don't currently have a moth infestation, you can stop here if you wish, but it's extra safe to continue.
- 2.** Remember, clothes damage is caused by larvae, not moths. Start by cleaning out the areas where you've observed clothes or carpet damage. Remove all the clothes in the closet so you can really Hoover up the nooks and crannies, and wipe down the surfaces with any household cleaner or moth killer spray. Vacuum under the sofas and rugs, and pay special attention to the edges!
- 3.** Once you're done vacuuming, dispose of the vacuum bag outside. It could be full of larvae, and we want them out of your home for good. Give your vacuum a thorough clean too, just in case there are any eggs remaining inside it.
- 4.** Wash all of your clothes at as high of a temperature as possible. For clothes that aren't machine washable, you'll need to get these dry cleaned.



Now that you've eliminated the larvae, you can sit back, relax, and let your moth traps take care of the rest. Here are some tips on how to maintain a moth-free environment:

### **USE COMPRESSION BAGS FOR YOUR WOOL**

If you're not going to use an article of clothing for a good while, we'd highly recommend storing it in a compression bag. Not only will this prevent moths from ever being able to lay eggs on it, it'll also save space in your wardrobe!

### **ALWAYS CLEAN USED CLOTHES**

Even if you just put it on for a few minutes, don't hang that top back up in the wardrobe! The tiniest amount of sweat is an oasis for larvae, and they'll be attracted to worn clothes.

### **MAKE SURE YOUR LAUNDRY BIN IS AIR-TIGHT**

As mentioned above, moths love dirty clothes, so make sure they can't get into that basket!

### **DISTURB THEIR PEACE**

Clothes Moths *hate* light and activity, so if you want to scare them off, open up your wardrobe every now and then, and rifle through your clothes as obnoxiously as possible. It's great, vindictive fun for the whole family to enjoy!

### **CONTINUE TO USE MOTH TRAPS**

A single moth trap lasts for 3 months. Once the infestation has been dealt with, you can use the traps as an early detection system. When their sole purpose is to monitor, you only need to use one trap at a time, so one pack of 5 will last you over a year!



# CHAPTER 4

## HOW TO DEFEAT PANTRY MOTHS

You can start by purchasing the correct traps! These are clothes moth traps. What's the matter with you, can't you tell a *Tineola Bisselliella* from a *Plodia Interpunctella*?!

“No,” you protest. “I’m not a ruddy entomologist!”

Fantastic point, Hagrid! Yeah, we agree, and we don't think anybody should be punished for being unable to tell if they've got clothes moths, pantry moths or neither. If our traps don't attract the kind of moth you've got, we've got your back.

In the future, we hope to add pantry moth pheromones to our traps, but in the meantime, here's some advice:

- 1.** Purchase a new set of moth traps immediately. Make sure they're sold as 'pantry moth traps'!
- 2.** Find the source of the infestation. Whatever it is, and however much of it there is, take it outside and dump it in the bin. It's unsalvageable.
- 3.** Clean all of your cupboards, kitchen counter tops, drawers etc. with moth killer spray. Vacuum it up after and dispose of the bag outside.
- 4.** Store dry foods in air-tight containers from now on, and when these are empty, clean them thoroughly.
- 5.** Just like clothes moths, pantry moths hate being disturbed, so don't leave a cupboard unattended for too long.
- 6.** The main source of pantry moth infestations are contaminated dry foods brought into your home. Be vigilant with these, and buy the factory-sealed stuff wherever possible!



# CHAPTER 5

## MOTH TRAPS VS. ALTERNATIVES

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The difference between moth traps and the alternatives is like the difference between a bona fide superhero and your uncle in a onesie. And even among the traps, certain brands are better than others. But of course, you already know that.

So, as we've established, moth traps work through a combination of glue and pheromones. The pheromones attract male moths to their doom, which in turn causes the female moths to search elsewhere for partners. How do the alternatives compare?

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### **MOTH BALLS**

Please leave these in the 19th century where they belong. Seriously. Mothballs are basically poison in solid form, which evaporate over time into vapours that are toxic to moths. However, these fumes also have negative effects on pets and humans too. Mothballs are either made of naphthalene or 1,4-Dichlorobenzene. The former is banned across most of Europe due to its flammability, and the latter is recognised by California as a 'known carcinogen'.

Besides all that, they stink. And if you can smell them, that means you're breathing in pesticide fumes. It's simply not worth it. Try anything but these.



### CEDAR WOOD

Cedar Wood is often sold in the form of balls, hangers, and chests. The oil within the wood is what repels moths, but honestly, they can be finicky. Firstly, you can't be sure of the source of the wood: some cedar trees are better than others. Secondly, cedar oil is very volatile, which means it evaporates quickly. When the concentration gets low, the wood stops being effective. You'll need to constantly replace it.

Unlike our traps, which are sealed in foil, cedar balls that are held in storage for a long time may be ineffective by the time they get to you. They could have been produced months ago, and could have lost their repellent properties long since.

### LAVENDER SACHETS

Lavender is preferred by many to cedar wood, given that there's less risk of getting oil stains on your clothes. However, it suffers from the same issue of volatility.

**NOTE:** Never use repellents and moth traps at the same time, as they'll render the pheromones in the moth traps useless!

### MOTH KILLER SPRAY

Unlike the other products mentioned here, we don't view moth killer spray as an alternative to moth traps, but as a complementary product. If you're in the midst of an infestation, we'd actually recommend getting some spray to kill the larvae that's already in your wardrobe or on your clothes.

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### HANG ON...

"Wait one second, Manchester Mothmen. Isn't this section inherently biased? Of course you'd sing the praises of the product you have a vested interest in!" you say.

First of all, calm down with the tough questions Socrates! Secondly, this is a good point! However, we encourage you to do your own research, and do offer this pretty good rebuttal in the meantime: if the alternatives were superior, we'd be selling those instead, especially as they're cheaper to make!

