

MOTHS



MOTHS

Physical Identification

One of the easiest ways to tell the difference between a butterfly and a moth is to look at the antennae. A butterfly's antennae are club-shaped with a long shaft and a bulb at the end. A moth's antennae are feathery or saw-edged. Butterflies and moths have many things in common, mainly scales that cover their bodies and wings. These scales are actually modified hairs.

Feeding

Most moths are pest of plants which means they mostly suck nectar. They eat anything that can dissolve in water, They mostly feed on nectar from flowers but also eat tree sap, bird droppings, animal dung, pollen, or rotting fruit.

Many people are under the impression that the adult moths named above are the culprits when it comes to the holes in cashmere cardigans or wool jackets. This is likely because the adult moths are more visible. After all, if you open your closet door and an adult moth comes fluttering out, you're going to assume that's what's damaging your clothes, right?

But here's the thing: The adult casemaking and webbing clothes moths don't damage your clothes at all. In fact, they couldn't if they wanted to, as they don't have mouthparts with which to feed. Their larvae do, however, and they like to feed on the natural fibers of your wardrobe. But why do the adult moths choose your closet as a breeding ground in the first place? And how exactly do their larvae leave holes in your clothing?

Well, unlike many other species of moths which are attracted to light, adult webbing and casemaking clothes moths like the dark. That's the first reason they seek out your closet. The second reason is because their bouncing baby larvae require keratin to develop.

Keratin is a protein found in your skin, hair and fingernails. It's also found in natural fibers that we get from animals including silk, leather, feathers, furs and — you guessed it — wool.

The adult moths lay their eggs — lots and lots of eggs — on keratin-rich materials so that the larvae will have plenty of nourishment as they grow. Webbing clothes moth larvae spin little tunnels that they travel through as they devour your sweaters and coats. These feeding tunnels are often the same color as the material of the clothes the moth larvae is damaging, as the tunnels are made of fabric particles and excrement. Casemaking clothes moth larvae, on the other hand, have portable cases that they carry along with them as they feed. These cases grow along with the larvae, and they also take on the color of the fabric the larvae are feeding on, making them almost impossible to spot, just like the tunnels of the webbing clothes moth larvae.

As each of these types of moth larvae feed, they make their way across the surface of your clothing. Think about a caterpillar munching holes in the leaves of your tomato plants. That's similar to how the moth larvae damages the clothes in your closets.

Of course, the more larvae you have in your closet, the more damage you'll see on your wardrobe. Additionally, moth larvae will eventually enter their pupation stage and will undergo metamorphosis to become adult clothes moths. After these new adult moths emerge, they will lay their own eggs, and the moth lifecycle—and destruction of your clothes—will begin anew. Typically, the entire lifecycle takes between four to six months.

— Taken from Terminix.com <https://www.terminix.com/>

Lifecycle

Clothes moths go through four distinct lifecycle periods with significant change at each stage. Understanding the clothes moths life cycle is key to knowing how to best deal with moth problems in the home, in both eradicating and repelling these destructive domestic pests.

Clothes Moth Eggs

The beginning of the Clothes moth lifecycle – adult female moths can lay 100-400 eggs over their short life and these eggs are tiny, typically 0.5mm in length. The eggs hatch from between 4 and 10 days depending on temperature and humidity.

Clothes Moth Larvae

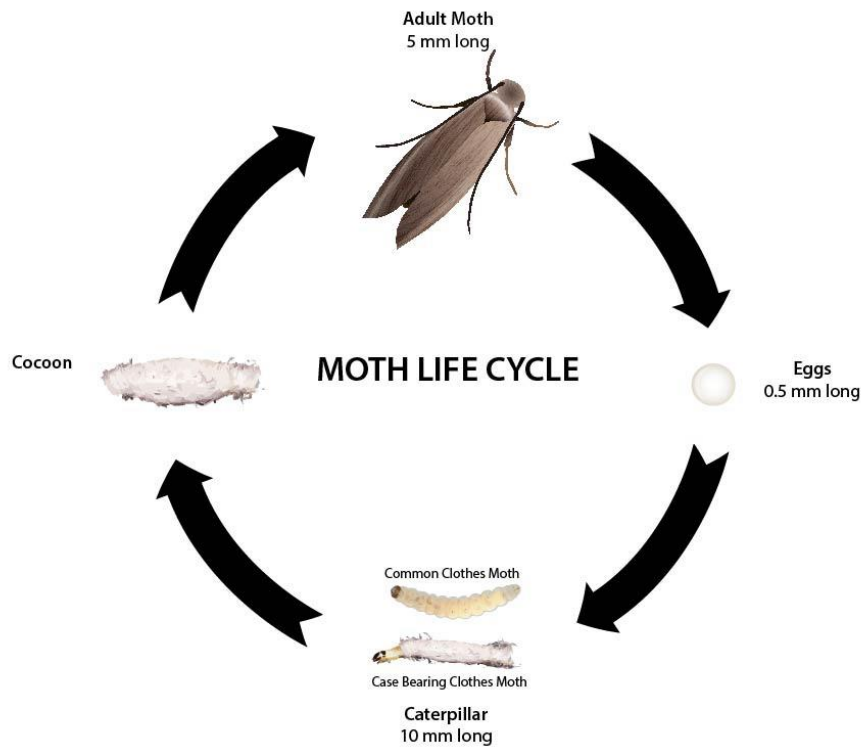
The eggs hatch as clothes moth larvae – this is the destructive stage. The larvae are typically a few millimetres long upon hatching but then grow to 1-1.5cm in length, dependent on availability of food (i.e. your natural woollen and silk clothing or carpets as examples!) and moisture to help intake of water – they cannot 'drink' in a conventional sense and hence require humidity. This is why residual perspiration or food and drink stains on clothing attract moths. Clothes moth larvae can stay at this stage for up to 30 months (2 ½ years!) happily eating your clothing whilst waiting for the right conditions to turn into adult moths. This is precisely why clothing moth issues persist through the winter, not just from the Spring when the adults tend to start flying.

Cocoon

When the temperatures are right and the larvae have reached the right size, they then start the pupation stage where they spin a cocoon in which they metamorphose into the adult moth. This remarkable natural process typically takes 8 to 10 days. You may find the 'debris' from this stage in the form of used webbing cases from which the webbing clothes moth takes its common name.

Adult Clothes Moth

The final part of the life cycle occurs when the adult clothes moth measuring about 1-1.5cm emerges from the cocoon. Whilst relatively harmless in their own right, the presence of adult clothes moths signals a potential infestation should they be allowed to lay their numerous eggs. The female adult clothes moth tends to hop or crawl – it is the male that flies more often in search of a mate.



Harbourage

'A simple rule of thumb'

When locating harbourages of clothes moths and carpet moths, we are often consumed by the image of a bear tracker trekking through the Alaskan wilderness, looking for faint footprints, broken twigs and scratched bark, having only the most minuet of details to indicate the path of the quarry, with only the most seasoned of veterans being able to locate their elusive antagonist.

Unlike bears, moths are relatively predictable. Locating the key areas to ascertain both the extent of an infestation and the damage it might have caused is easy to do when following these four simple guidelines.

- Dark spaces**
- Cracks**
- Crevices**
- Keratin**

Moths will always lay eggs near a food source, so that as the eggs transition through the life cycle to the larvae stage they have ample food nearby to transition again to the adult phase of the life cycle. As such a room with no natural fibres is highly unlikely to be a residence for moth eggs.

High content keratin fibres include: **wool, silk, cashmere, viscose, leather and furs**

Moths will always favour dark places and deep harbourages in which to lay their eggs, as such check around the edges of a room along the wall-floor junction, under and behind heavy furniture (particularly furniture which is flush to the floor, including under table legs and the underside of keratin rich furniture such as sofas, these are often missed in a reconnaissance mission of the home). Look to clothing at the back of a wardrobe or drawer and at the bottom of a chest or storage box in the darkest space, this will often be where the initial signs of damage will be most prevalent and easily identifiable.

For both clothes moths and carpet moths you will be looking for holes in clothing or fabrics, bald, threadbare and worn patches in carpets or case bearings which look like small grains or rice.

By following these four commandments you will be able to locate the areas in which to focus your eradication strategy. A key product to aid the monitoring of your home is the Demi Diamond Moth Trap, this pheromone based trap will attract the adult males helping you monitor any adult population and pinpoint areas of activity whilst simultaneously disrupting the breeding cycle and reducing the risk of further breeding, egg laying and damage.

by Henry A Collison

Health Risk

Moths and butterflies are potentially dangerous to people in one context: eating them. While most butterflies and moths are likely non-toxic to hungry humans, a few species -- like the familiar monarch butterfly (Family Nymphalidae) -- feed on poisonous or unpalatable plants as larvae.



Brown House Moth



Common Clothes Moth



Case-Bearing Clothes Moth



White-Shouldered House Moth