Resource: **Collections – Pest Information Sheet**

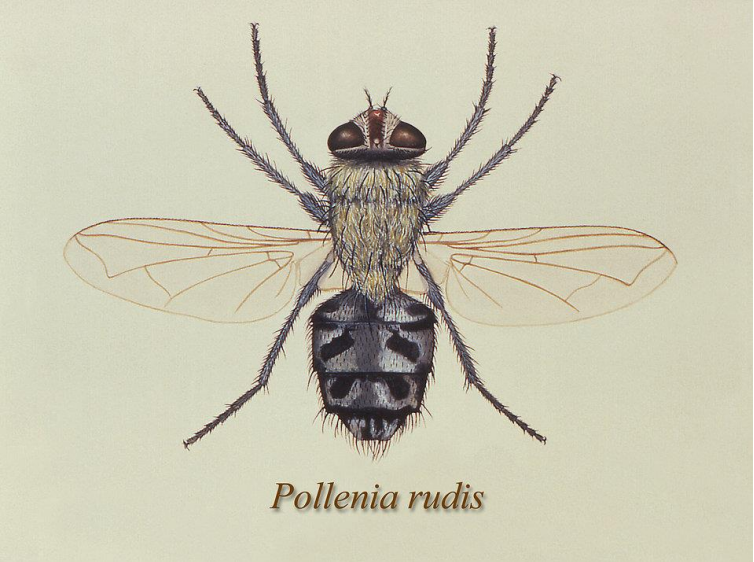
Cluster Flies

Pollenia Rudis

Size
10-15mm

Favourite Food
Larvae are parasites in earthworms. Adults eat mainly plant fragments and some meat.

Features
Larvae – Long thin maggot, only found in earthworms
Adult – Black fly with large eyes, clear wings, golden hairs on the back



Pollenia Rudis Public Health Image Library (website) [CC0 1.0]

What's that slowly buzzing around the windows? If they are quite **large, black flies** with **clear wings**, and **large brown eyes** and there are lots of them, they are probably cluster flies.

The bodies may look paler because they have **pale, golden hairs on the back**, but they are different from the metallic sheen of bluebottles or the smaller, faster houseflies with red eyes.

Top tips:

If you are at all unsure about how to deal with any pests in your collection or store, contact a conservator (or the Conservation Development Officer if your museum is in the South West) for advice.

Eggs and larvae

Cluster fly eggs are **laid on the ground** and the newly-hatched larvae **burrow into earthworms** where they mature for up to a year. In late summer the adult flies emerge from the soil where they laze in the sun, feeding on nectar and plant detritus. As the weather turns cold, though, they look for shelter and your cosy museum may be very attractive.

Cluster flies are also called “attic flies” because the large clusters of them are often found in spaces at the **top of buildings**.

The flies will **gather in warm places** - especially south-facing walls - while they search for a way into the building. If you spot a large gathering of flies on the outside, check that windows and vents nearby are well sealed on the inside to prevent them getting in.

You might find them gathered in **visible areas such as windows**, where they can be seen, but sometimes **inside panelling or cracks** in the building, which makes them much harder to spot.

In spring they will emerge and, again, you may find large groups of them near windows, looking for mates and a way out to feed and lay eggs in the soil.

Why are they a problem?

The larvae are only found inside earthworms, and the adults are usually herbivores, so they don’t attack the collection. However, they still cause three problems in museums:

1. Fly droppings (and vomit) can leave small **unsightly marks** on painted surfaces and objects on open display. These can be difficult to remove safely. Ask a conservator for advice before trying to clean them off an object. In the South West, the Conservation Development Officer can help.

2. The nuisance of having large numbers of insects slowly **buzzing around** and settling on windows or walls. They can even be so numerous that they **set off alarm systems**.

3. The **dead flies are an attractive food source for pests** which are more dangerous to the collection, such as carpet beetles. Once these pests have finished eating the cluster flies they will look for other protein nearby, and may attack objects such as fur, feather, leather or insect collections.

What can we do?

- The best defence is **not letting them in**. Check that windows and vents are closed or covered with insect-proof mesh when open.
- **Seal small cracks and gaps**. Use bristle strips under doors or small strips of polythene foam to block gaps around window frames.
- **Remove dead flies** promptly. A vacuum with a long nozzle can be very helpful.
- You can use **UV fly-killers** in suitable areas (make sure the objects are not exposed to the UV radiation).
- Constrain and similar **permethrin-based insecticides** may help to reduce the population if sprayed on window areas where they gather. Never spray pesticides on or near objects and always follow the manufacturers' safety instructions.
- If you have potted plants in the museum, **cover the soil with a breathable membrane** to prevent flies emerging (or laying eggs on the soil).

Not just Cluster Flies?

See our guides to treating other pests on our resources page.

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