# Transcript – The Museum Life of Pests by South West Museum Development

Our Museums contain lots of fascinating objects

Unfortunately, many creatures find them just as interesting – and highly munchable.

Rodents, insects and other small arthropods can quickly cause damage.

Birds and other animals leave harmful deposits.

We call these … PESTS!

Pests need four things to flourish:

A quiet place to raise a family, food, warmth and moisture.

Objects made of organic materials are perfect for peckish pests. So, what do pests like to eat?

Some moths and beetles nibble on animal protein: wool, silk, fur and feathers, hide and leather.

Insect collections and stuffed animals can be delicious.

Wood-boring beetles and booklice eat, well… wood and paper, while others choose seeds, starch or dried plants.

Silverfish and woodlice munch on microscopic moulds that grow on damp objects.

Rodents love the protein-rich parts of the collection and chew up textiles and paper for nesting material

But where are they coming from?

In most cases, it is the insects’ larvae, that attack museum objects. They can be less than one-tenth of a millimetre long, so we need to be very thorough when we look for them.

Adult pests fly in through open windows and doors or crawl through gaps and cracks.

They can also hitch-hike in on people or objects.

They may be living outside the museum.

A birds’ nest can be home to carpet beetles whose larvae feed on animal protein.

When the birds leave, the beetles crawl down into the rooms below. Their eggs hatch into more larvae that chew through carpets, textiles and stuffed animals with gusto.

Once a colony is established, they can quickly spread through the museum

So how can we protect our collection?

We have to spot these intruders and prevent them spreading. We can’t rely on a few pest traps or insecticide. We need to take a holistic view of the museum: that means all the people, all the places and all the activities, all the time.

We need Integrated Pest Management.

With training and information, everyone can play their part.

Protecting the collection and knowing what to do if they spot signs of pests or damage.

First we map the museum and assess the risk zones for the collection.

Organic objects on open display or in storage are in high-risk zones.

Vulnerable objects in well-sealed cases, or study areas, are in medium risk zones.

Areas where there are no edible objects are low risk zones.

There should be clear signs in risk areas so people know what actions to take and what to look out for.

Next we make it harder for pests to get in by using double doors, draught excluders, trap mats and window screens. We seal chimneys and gaps in the building properly and use insect-proof mesh on vents.

Prompt building maintenance helps prevent pests entering and eliminate areas of damp.

We quarantine all items and inspect them thoroughly before allowing them near the collection. Coats and bags can bring in hitch-hikers, so offices and work areas, the cafe and shop are included in the Pest Management Plan.

We regularly check blunder traps in all areas to see what’s moving around. We also examine the objects, especially the vulnerable ones with a high munchability index.

The Integrated Pest Management Plan has procedures for dealing with infested objects.

We isolate and treat them, usually by wrapping and freezing them to kill the pests.

In the past, collections were treated with long lasting pesticides like DDT.

We don’t use these now, because they are harmful to people and the environment.

Instead, we have to be extra vigilant - we are the best protection for the collection.

When we find evidence of pests, we deep clean, moving everything out and treat the whole area with a short-lived insecticide or desiccant dust. Pests in structural timbers are best treated by professionals.

Remember, pests need four things to flourish: a quiet place to raise a family, food, warmth and moisture.

We make sure they don’t find these things in the museum by:

Regularly inspecting all areas, especially dark corners,

keeping infrequently used areas well ventilated,

cleaning floors and surfaces to prevent dust building up, using a vacuum with a HEPA filter and microfibre cloths,

preventing damp and condensation,

removing food residues and waste promptly.

We regularly check the Plan and ask everyone for ideas to improve it.

Our Integrated Pest Management Plan is the best way to make sure that pests stay outside the museum where they can flourish without destroying the collection.