

### Treatment of Active Woodworm

*This guidance is for treating wooden items (including those which may also contain a small amount of metal or leather). It is not suitable for items containing ivory, glass or other materials (if they do, then isolate them as described in Step 5 below and check with a conservator before treating.)*

#### Signs of active woodworm:

- Fresh looking holes (light colour inside)
- Beetles or fresh frass (insect droppings)

#### Materials you will need:

- Camera (photograph and document each stage thoroughly)
- Acid-free tissue
- Ziplock bags
- Paper and pencil for labelling
- Polythene sheeting (if your object is too big for the ziplock bags)
- Plastic parcel tape
- Acid-free tissue
- Suitable protective clothing including gloves and goggles
- Disposal bag
- Vacuum with a HEPA filter (always empty after use)
- Access to a freezer (to store the affected items for at least a week)
- Tweezers
- Soft artist's paintbrush

#### Method:

1. Prepare a suitable work area with layers of acid-free tissue on the work-surface so you can see and capture any loose fragments or insects.
2. Assemble all the tools and materials. Put on your protective clothing.
3. In your workspace and storage area, get everything up off the floor and vacuum, including vacuuming all shelves. Often woodworm beetles emerge from the underside of wooden crates and live between the object and the floor, so examine the underside of any wood or card boxes and vacuum.

#### Top tips:

- Seal the contaminated object in a **ziplock plastic bag** (or if a large object, sheets of polythene) ahead of freezing.
- **Prevent freezer burn** – make sure every edge of the wrapped object is fully sealed and airtight with tape.
- Writing on the bag may fade – make sure you **write a paper label**

4. Assess your objects. Isolate any wood that looks as though it has fresh woodworm holes. Plan to treat these items as soon as possible, but aim for before March/April when adult worms may emerge.
5. Put the contaminated wood in ziplock bags or polythene, write and insert the paper label and form an airtight seal. If it has metal parts or might be damp, place it on a pad of acid-free tissue in the bag to help buffer changes of moisture and prevent condensation. Delicate or decorated items should be wrapped in acid-free tissue before sealing in the bag.
6. Place the sealed object in a freezer until you are sure it is frozen all the way through. This can take a week. If the freezer is a commercial one and reaches -26°C consistently you only need to freeze it once. If it is a domestic freezer, and only reaches -20°C you need to freeze it for at least a week, gently lift it out (remember the object may be very brittle while frozen, so support it on a tray or card if it is fragile).
7. Let the object thaw, still sealed, for a week and then freeze it again for at least a further week. This will kill the adults and larvae on the first freeze, trigger the eggs to start developing and kill them on the second freeze.
8. After freezing is complete, allow the object to defrost for several days before opening the package. Do not open the polythene until the item has finished thawing right through. Only open the package when you have a clean area to put the object back in. Gently examine the object, picking off any insects or debris with the tweezers and the paintbrush.



Example of a woodworm ([image CC:BY-NC-SA2.5](#))