Saving money with IPM – Integrated Pest Management at the Kunsthistorisches Museum

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Fig. 1: Main building of the Kunsthistorisches Museum Wien.

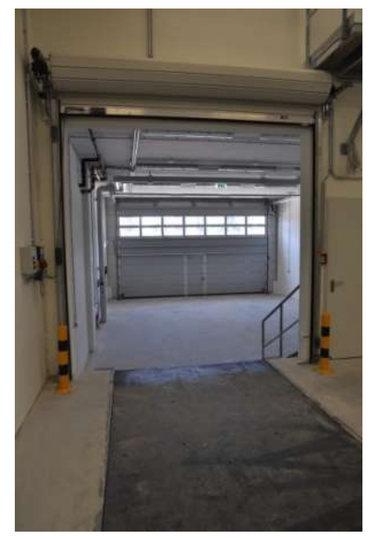

Fig. 2-4: New storage depot outside of Vienna. Fig. 2: Exterior view. Fig. 3: Interior view. Fig. 4: Entrance area.

Introduction

The Kunsthistorisches Museum Wien is one of the largest fine art collections worldwide, comprising the Kunsthistorisches Museum Wien, the Austrian Theater Museum and the Museum of Ethnology. It was the first Museum using Integrated Pest Management (IPM) in Vienna with a nitrogen chamber. For the relocation of the main storage depot not all collections could be treated as a preventive measure. Therefore during the planning and construction period of the new storage depot (2009-2011) all relevant collections were monitored with traps as part of a large IPM program. With this and the result of the monitoring of previous years, infested objects were detected and further actions taken.

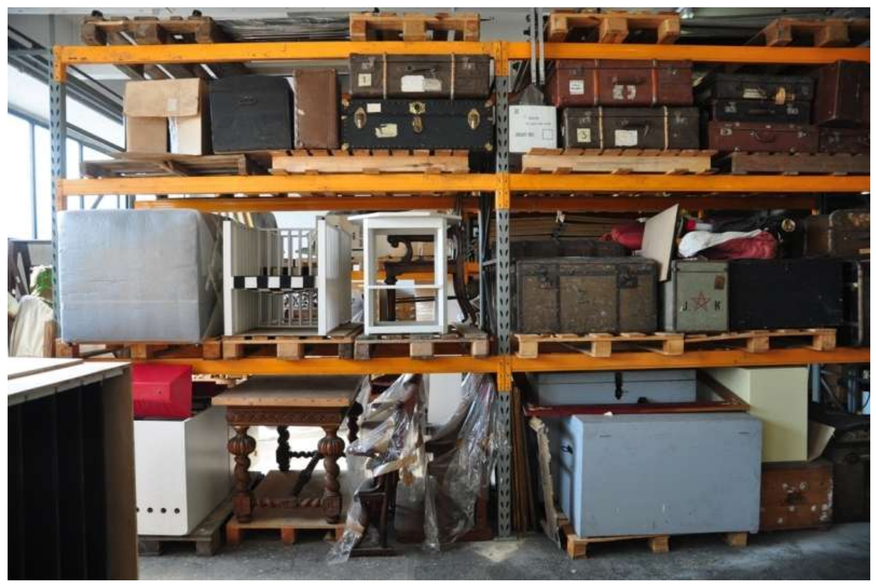

Fig. 5: Storage site of the Austrian Theater Museum where an webbing clothes moth (*Tineola bisselliella*) infestation was detected.

Fig. 6-7: New and larger nitrogen chamber in the new storage depot with two Quarantine rooms and one special room for treating fungy infested objects.

Fig. 8-9: Biscuit beetle (*Stegobium paniceum*) infested paintings of the picture gallery and paintings and frames in the large nitrogen tent (>1000 m²).

Results

Specific pest problems in the collections of the Kunsthistorisches Museum Wien are a biscuit beetle (*Stegobium paniceum*) infestation of paintings lined with starch paste linings. Further webbing clothes moths (*Tineola bisselliella*) were found in the Museum of Carriages and in a storage site of the Austrian Theater Museum. Infested collections are being treated with nitrogen before the collection removal in the summer of 2011 to prevent an introduction of insect pest species into the new storage depot.
A large nitrogen tent was build for the treatment of the paintings in the old storage site. Smaller tents were used in the storage depot for the horse carriages. The infested theater collection will be treated in the new nitrogen chamber after the relocation.
In the new storage depot a new monitoring program will start 2012 to check the success of the treatments.

Fig.10-11: Webbing clothes moth (*Tineola bisselliella*) infestation in the museum of Carriages in Schönbrunn and the nitrogen tents to treat them.

Conclusion

We could show that an Integrated Pest Management program **can help to save money if not all collections have to be treated before the relocation to a new storage site**. The longer a monitoring of insect pests is already in place the better and reliable are the results. We therefore recommend all large and small collections and museums to introduce a monitoring and IPM program.

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Collected moths	580	249	220	197	175	136	103	120	97	159	86

Tab.1: Webbing clothes moths collected with the monitoring in the museum of Carriages in the last 10 years.

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