THE EXOSEX CLOTHES MOTH SYSTEM AND ENGLISH HERITAGE

English Heritage is responsible for a wide range of collections ranging from fine art to archaeology. They are responsible for approximately 140 sites throughout England including large and small historic properties, museums and purpose built stores.

WHAT IS THE EXOSEX CLOTHES MOTH SYSTEM?

Exosex is a non-chemical & non-toxic 'pest confusion' treatment designed specifically to control the highly destructive larvae of the Webbing clothes moth. It uses a synthetic female pheromone to attract male clothes moths into a dispenser where the Exosex 'Entostat' powder combined with the pheromone is situated. Males are 'lured' to the dispensers and upon entering the powder coats their bodies. The senses of the coated moths are overwhelmed and they cannot detect females as a result. As they leave the dispenser, they then attract other male clothes moths and so spread the confusion effect. This means that the females do not mate and lay non-viable eggs resulting in far fewer larvae.



Exosex CL Dispenser with pheromone lure

WHERE DID WE IMPLEMENT THE SYSTEM?

We implemented the system at Marble Hill House, London in 2007 as an increase in webbing clothes moth numbers was recorded in both 2004 and 2006. This continuing increase caused concern so we took the decision to start a trial of the Exosex moth confusion technique in July 2007.



Marble Hill House, London

SETTING UP THE EXOSEX SYSTEM

We had to show discretion as to where we placed the Exosex dispensers as the house is open to the public at weekends and is also used for private functions. The new CL hanging dispensers are much smaller than the previous CLM designs and as a result we have found them to be easier to site under items of furniture, against walls, behind screens, on top of four poster beds, in fireplaces and on stairwells. We currently use 24 of these throughout the house in various locations







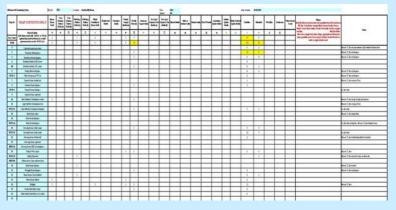


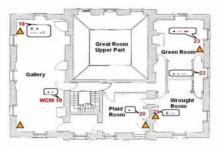
MONITORING AND ANALYSIS

We negotiated to keep the monitoring and recording of this system 'in-house' by our own staff as they are trained and experienced in insect pest ID, trapping techniques and basic treatment methods. They received initial 1:1 training from the external pest control technicians so that they would be responsible thereafter for replacing the Exosex CL dispensers every six weeks.

This allowed us to note from our own quarterly monitoring trapping records whether the system is effective each year in decreasing and stabilising the number of clothes moths being caught on the traps. Results just over three years later have shown that the system has been effective and the moth counts have decreased with a total of 2 caught during 2010 compared to 41 in 2004 and 36 in 2006.

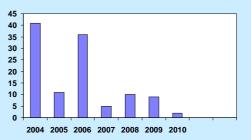
This result is very encouraging and we are continuing the trial in 2011





Marble Hill House - Second Floor

CATCH OF WEBBING CLOTHES MOTH FROM 2004 - 2010



BENEFITS OF THE EXOSEX SYSTEM & IN-HOUSE DEPLOYMENT

1) A significant decrease in the amount of webbing clothes moths being caught on traps without using pesticides or other treatments.

2) Less threat to the collections from insect pests.

3) EH staff undertake and continue the dispenser changes running alongside the tried and tested EH in-house IPM monitoring system.

4) A saving in costs as we do not pay for external technician fees.

5) For security reasons a member of the in-house staff would have to accompany a technician if they replaced them. By doing this ourselves, we do not have this problem.

6) EH having control of the data for writing up a yearly report and publication.

Photography: English Heritage