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CONSTRAIN: An insecticide developed for museum use.

Most insecticides have been developed for agricultural, commercial or industrial use. That is, they are designed to be powerful and efficient insect killers on materials that have specific functions (such as foodstuffs) and usually short-term life. Although all insecticides are registered under the Pesticides Regulations Act 1986 and have to conform to standards of safety, the formulations incorporating the insecticide are developed to satisfy the usual commercial demands. As a result, many of the products currently on the market are not suitable for treating museum collections, where long-term safety to human health and the well being of the object is essential.

CONSTRAIN was developed to produce an insecticide of proven efficacy, that was environmentally sound and also satisfied current conservation criteria.

The product

The insecticide permethrin is sparingly soluble in water and so other formulations use water dispersible powders, oil/water emulsions or organic solvents such as white spirit. CONSTRAIN is a micro-emulsion, that is, a clean thermodynamically stable dispersion of permethrin in a neutral surfactant which does not have an oily or high solvent content. It has rapid penetration into a variety of substrates including timber and being

water-clear does not stain or leave a visible residue. On exposed surfaces it is totally biodegradable but when absorbed into materials will give extended protection.

CONSTRAIN was tested for its insecticidal efficacy by the Central Science Laboratory, Slough, and found to perform as a residual insecticide, as well as or better than comparative products. It is cleared for all museum pests, including wood borers, textile pests, silverfish, book lice etc., and as it is cleared for amateur use non-professionals can happily use it - following the instructions on the label.

In order to test its conservation worthiness, CONSTRAIN was tested by the Oddy test for any enhanced attack of metals (steel, lead, copper, tin, silver) and showed no effect. It was also applied to a wide range of textiles variously dyed to check for any staining or colour change, and also on a range of papers and cards. Again, there was no visible deleterious change.

CONSTRAIN was developed to provide a safe effective insecticide that can be used directly or indirectly on a wide range of museum materials and collections. Although it would be naive to expect it to be suitable in all circumstances where a residual insecticide is needed, it does meet most conservation criteria and is a useful addition to the armoury.

CONSTRAIN is available in 500ml trigger packs at £5.00 (+VAT) inc. p+p from Historyonics, 17 Talbot Street,

Cardiff, CF1 9BL [Tel. 01222-398943.
Fax. 01222-235193]

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What Use are Collection Surveys?

Most people working in museums particularly those responsible for collections management are familiar with the concept of collection condition surveys. The use of statistical methods to sample survey collections may have made the process manageable but it is still an enormous commitment. The purpose of the paper is to examine if these surveys are being used in the most effective and efficient way.

The real starting point for the popularity of condition surveys was 1988 when the National Audit Office published "*Management of the collections of the English National Museums & Galleries*".

In 1991 UKIC organised a conference on storage at which Suzanne Keene presented a very influential paper (well worth reading) on Audits of Care. This described a method of carrying out a sample survey of collection condition using a simple questionnaire and scoring system. In order to be clear about what was involved in the survey and to differentiate the technique from condition reports the methodology was defined - "*collection condition surveys are surveys undertaken in order to*

assess, or audit the condition of collections as a whole, rather than to identify objects requiring action" (Keene 1991)

Unfortunately the definition has not stuck precisely and this has led to a plethora of surveys being carried out using the Keene method but with varying aims. Any review of papers on the subject will confirm this diversity; it is easy to draw a list of nearly 20 different reported motivations for surveying. (Taylor, pers. comm) This suggests that the condition survey method is being applied to gather information on a much wider remit than it was originally designed for.

In researching the presentation I read 12 published articles on surveying. I found that they fell naturally into three groups. The first could be described as classical Keene type surveys although often these were individually amended by the institution. The second type I shall describe as audit of the state of conservation and collection condition and were normally conducted over several institutions. The third type I describe as simple snapshots. I chose to look at them all together as the survey methodologies overlap.

Looking at each in turn I looked at the stated aims, the results quoted and finally whether I thought it might have been possible to achieve the results in a simpler way.

The first type (Keene model) listed aims including:

- identify storage improvements
- identify environmental improvements