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Biological Collections at Hampshire County Council Museums Service

Hampshire County Council Museums Service biology collections are stored in a building that was once a farm outhouse. Temperature and humidity fluctuations have always been a problem with annual parameters of 2° C to 27° C and 45% to 75% RH.

Results of high temperature combined with low RH in the summer season, provided me with extra work mending taxidermy cases whose backs had split apart, some in several places, allowing entry for the customary moth and beetle. Fortunately, this situation only arose in 1997, after the annual zenith for ingress of insect pests (March to May) so that no specimen damage ensued. The opposite extreme, cold and damp, provided mildew and other air-borne fungal spores to thrive either inside the cases or even on the exteriors as well.

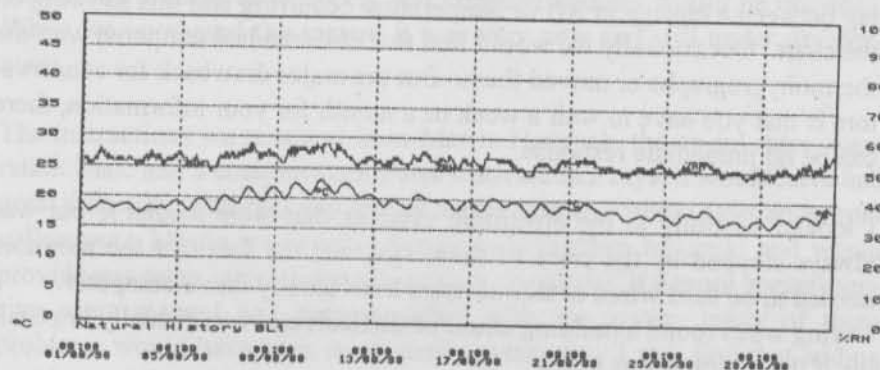
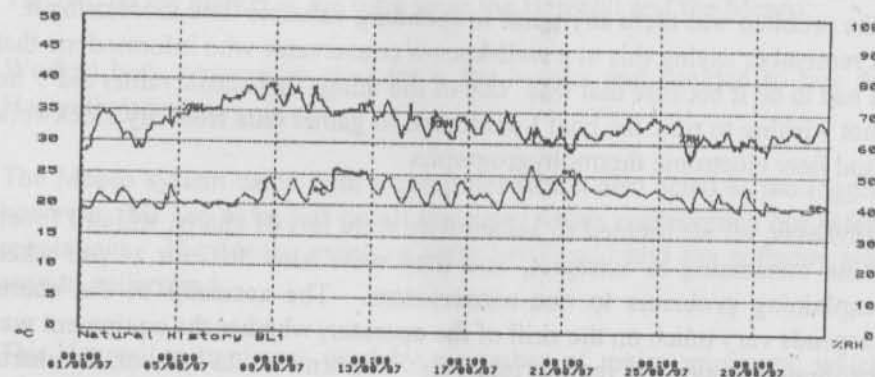
A Meaco monitoring system was installed c.1995 and proved effective in monitoring the numerous buildings around the site containing all manner of collections and which were all sensitive to hygrottemp fluctuations.

Block 1, as it is known, where the biology collections are housed, was listed as a priority for treatment and earlier this year a humidifier/de-humidifier and temperature regulatory system was installed using the Danish Cotes CR110B system for temperature regulation and dehumidification balanced with a Swiss Defensor 505 humidification system. The latter units are dish-shaped and sit on shelves near a hygrostat and self-activate if the humidity levels are too low. So the Swiss system is worked hard in the summer and the Danish system in the winter.

To date, the results are gratifyingly rewarding. No more split cases and no more fungal growth. The temperature level, although cool during November (11° C) compares favourably with what it used to be.

Cost for supplying and installing two dehumidification and three humidification systems and humidistats came to £5,253.00 excluding VAT, half of

which was covered by a grant from SEMS. The equipment was supplied and installed by Sorption Wheel Services Ltd (SWS), 90 Station Road, Wickwar, Gloucestershire, GL12 8NB (Tel. 01454 299387, Fax. 01454 294278).



Figures show Humitemp traces for August 1997 and August 1998; (RH is upper trace), showing greater stability of fluctuations during 1998 and within normal storage parameters.

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