

NatSCA News

Title: Risk zones for IPM: from concept to implementation

Author(s): Doyle, A. M., Pinniger, D.

Source: Doyle, A. M., Pinniger, D. (2005). Risk zones for IPM: from concept to implementation. *NatSCA News, Issue 6*, 31.

URL: http://www.natsca.org/article/283

NatSCA supports open access publication as part of its mission is to promote and support natural science collections. NatSCA uses the Creative Commons Attribution License (CCAL) <u>http://creativecommons.org/licenses/by/2.5/</u> for all works we publish. Under CCAL authors retain ownership of the copyright for their article, but authors allow anyone to download, reuse, reprint, modify, distribute, and/or copy articles in NatSCA publications, so long as the original authors and source are cited.

Museums Journal, 2005(5), 15 Croft, C. 2002. Animal magic: Do our furred and feathered friends have a future as exhibits? *Museums Journal*, 2002(9), 32-35

<u>Adult education as a tool for volunteer training and recruitment</u> - Sigwart, Julia*#; Monaghan, Nigel*

*National Museum of Ireland, Natural History Division, Merrion Street, Dublin 2, Ireland #University College Dublin, Department of Zoology, Belfield, Dublin 4, Ireland

We all know that volunteer labour is integral to the normal functioning of almost every museum, in both the public and research sides of Museum life. There is naturally a constant concern about standards to ensure that the volunteer-museum relationship is constructive for all parties. Particularly treacherous is striking an effective balance between initial training investment from (paid) staff and the capricious promise of unpaid effort, compared to the eventual benefits volunteers bring. The National Museum of Ireland Natural History Division is scandalously understaffed—with two full time curators for a significant European capital's collections—thus recruiting a core of reliable volunteers is clearly a priority under our new scheme to improve collections access. However, for historical socioeconomic reasons in the Republic of Ireland there is not the established culture of "volunteerism" that other countries can depend on. Adult education is a creative and effective solution to answer both recruitment *and* training issues for museum volunteers.

In Autumn 2004, we elected to pursue an Adult Education module as an addition to our joint teaching programme with University College Dublin. The resulting course "*Dead Zoo: behind the scenes in the Natural History Museum*" aimed to introduce interested members of the public to the living scientific research face of the National Museum of Ireland (NMINH). The other, unadvertised aim of this course was to train a group of prospective volunteers with an effective six-week orientation programme.

The class was administered through the University College Dublin Adult Education Centre and advertised through the annual UCD "interest courses" brochure. The Adult Education Centre was particularly eager to help as they have experienced a chronic shortage in tutors for science-based interest courses, despite demand from the public. The established administration of the Centre also handled all queries, registration, and student fees. A small honorarium was paid to two tutors who presented the six weekly sessions. Classes were scheduled during working hours, two hours per week, and held in the NMINH exhibits building. Place and time were carefully selected—all students who were free to attend the class would potentially be free in future to volunteer. Topics were selected from a range of subjects, including lectures and discussions on the breadth of uses of museum objects, background in biodiversity and evolution, and an introduction to object conservation. Learners were typically retired individuals, with a keen interest but no academic background in the sciences.

Many of the learners who took this course said that they enjoyed it immensely—the small class size and novel setting made for an exciting contrast to the typical dowdy evening lecture series. The course was particularly praised for being held in the daytime—the only Adult Education course not offered in the afterwork hours—as retired individuals many of the learners are often hesitant to travel alone in the city after dark. Covering a breadth of topics, loosely themed on "collections-based biology" also allowed learners who missed one or more classes to feel they could return with out having fallen behind in lessons.

These learners come away with a common basic knowledge about collections and museum procedures taught in a structured course, and we impressed upon them the important contributions that could be made by volunteering. Indeed, since the course required a fee, volunteering (for free) can feel even more rewarding. This learning experience was highly successful for the 16 students enrolled, and "*Dead Zoo*" was an integral part in our Teaching Programme 2004, which was awarded the top prize for outreach in the all-Ireland Museum of the Year Awards. Six individuals (i.e. one-third of the class) have stayed on as volunteers in various capacities, suited to their interests and abilities. More importantly, the whole class has come away with a new understanding that there is a life "behind the scenes" of the Dead Zoo.

<u>Risk zones for IPM: from concept to implementation</u> - Doyle, Adrian M.*; Pinniger, David**

*Palaeontology Conservation Unit, Natural History Museum, London, SW7 5BD, UK

**83 Westwood Green, Cookham, Maidenhead, Berkshire Sl6 9DE, UK

A ban on the use of dichlorvos [DDVP] in the UK resulted in a need to implement an Integrated Pest Management (IPM) programme to protect vulnerable collections in storage areas and on display at the Natural History Museum, London.

With such a large diverse collection in a complex series of interconnecting buildings it was necessary to break the programme down into sections.

A key to this was the decision to define and adopt the concept of "Risk Zones" from high risk A, to low risk D, for all areas of the museum.

The paper describes the development of ideas and subsequent implementation of the "Risk Zone" concept.

We will also make observations on the need to identify priorities and the importance of training staff at all levels in pest awareness.

The application of GIS to IPM risk zone mapping

- Smith, David A.; Jones, Angharad

Mineralogy Department, The Natural History Museum, Cromwell Road, London. SW7 5BD, UK

A geographic information system (GIS) is a computer-based tool for mapping and analysing features that exist, and events that happen, on earth. It offers a platform to overlay the visual representation of tabular data and build queries to interrogate the variables to analyse trends or hotspots and assist in planning strategies.

The holistic approach of the Integrated Pest Management (IPM) regime was established through a strategy of managing risk to the collections. Each area of the museum has been designated in one of four zones grading from high to low risk. This then determines the priorities for action, the working practice in that area and the level of monitoring for pests. Analysing and correlating variable levels of documentation from so many concurrent initiatives could not be possible without a system that could translate the data into a common and comprehensible format. A pilot project demonstrated that the application of geographical information software to the improved integration of the various pest management activities was a viable solution.

The results of the pilot project demonstrated quite conclusively that the digital representation of risk zones would enable effective development of targeted strategies. Together with the attachment of captured data to a scaled plot of the spatial array of insect monitoring traps, this exercise showed that geospatial analytical software could be a hugely powerful tool to monitor pest population density across the museum and analyse trends with time. With the digital zones firmly embedded, there are enormous museum-wide implications in terms of environmental conditions of collection areas, space planning, disaster planning, exhibition design and security. The Natural History Museum, London will now look to implement a centralised database of pest monitoring data and integrate building environmental data to further improve the resolution of 'cause-and-effect' assessments.

Levels of IPM control, matching conditions to performance and effort

- Tom Strang, Canadian Conservation Institute

- Rika Kigawa, National Research Institute for Cultural Properties, Tokyo

Abstract

In this paper we model pest control activities across a wide spectrum of cultural objects that we try to protect, organized as a perceptual scale of biodeterioration situations. Within the scale, we set seven levels, in large part determined by accessibility to pests in commonly found protective structures against other deleterious agents. For each level there are described appropriate remedial IPM solutions to the more significant vulnerabilities. Long term planning would attempt to move collections up the levels to increase their protection.