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divide the overall task into specific miniprojects, driven variously by achievability, worth, opportunity and short-term requirements. In this way the overall long-term aim of developing indexable records of our collections and their storage locations is gradually being met. The psychological advantage gained from completion of these mini-projects cannot be overstated. The first of them (a computer generated version of the 901 entries in the Lukis Mineral catalogue – with donor and collection site indexes) was a memorable advance. Since then, other projects have included the Guille-Alles geology collection, various sections of the Guille-Alles vertebrate material (mammals, fish and birds) and a small collection of Blaschka glass invertebrate models. The latter was undertaken in response to an enquiry, the fish and bird projects were driven by display selection requirements.

More recently the museum has acquired the RECORDER biological recording software, with the original intention of developing site and species based records for the island. It had been hoped to develop a Biological Records Centre, in conjunction with the local natural history society, La Societe Guernesiaise. Unfortunately, there has been little corporate interest (on their part) to participate in such a scheme as the Society is perfectly happy with its own recording systems. For our part, however, RECORDER looks to be an ideal tool for capturing data relating to our insect collection. It has been used effectively to record the label data from part of a lepidoptera collection, where the specimens had been destroyed by infestation. Although the remainder of the collection is in good condition, we may continue to use RECORDER in the same way for **individual specimen data,** rather than attempting a formal numbering and accessioning procedure for each and every specimen. Overall, the insect collection is catalogued in MODES; each drawer or storebox is numbered and has a separate MODES record. The taxonomic groups within each storage unit are recorded as keyword strings and it has thus been possible to generate, quite quickly, a simple 'finding aid' index.

The downside, as far as natural history in Guernsey Museums is concerned, has effectively been a reduction in dedicated staff resources. The pilot project to develop computerised cataloguing (using the natural history collection) has expanded to cover museum specimen documentation procedures in all other disciplines. Unfortunately dedicated staff to accomplish this have not been forthcoming and the end result has been a lessening of time devoted purely to natural history matters, as day to day documentation and computer support services have taken precedence. The service is committed to Phase 2 of the MGC Registration Scheme and this involves removal of documentation 'backlogs' by the year 2000. A documentation assistant with MODES experience has recently joined the staff (initially for 6 months) and we are working towards the target of a basic record for each object, on a five year time scale. However, it is anticipated that the insect collection will, in the main and for the foreseeable future, still be recorded by taxonomic group, on a storage unit rather than a specimen by specimen basis.

COLLECTIONS DATABASE POLICY AND STRATEGY AT THE NATURAL HISTORY MUSEUM.

Rob Huxley, Natural History Museum, London.

The Museum is committed to the policy of databasing all of its collections. The objectives are to improve accessibility to the collections, to enhance the efficiency of curation and to aid monitoring and evaluation. Improved accessibility to the information contained within the collections is required to meet both internal and external needs. These needs stem from a variety of demands including those from countries working towards implementing the Biodiversity Convention, from education initiatives aimed at improving knowledge of natural history and the discipline of systematics, from commercial and environmental organisations, and from projects involving modelling and mapping of data. A further objective is to link our databases with those being constructed in other museums and relevant research institutions so as to share information in reaching common goals. A network of databases should help to improve collecting and conservation strategies, increase understanding of the diversity and distribution of plants, animals, rocks and minerals, and to make better use of limited resources.

A Collections Database Board has been set up under the Chairmanship of the Director for Science which has formulated the following policies and strategies for the foreseeable future.

Software development

It is the Museum's clear intention to develop software for collections databases in a precise and coordinated manner that will be compatible with the Museum's overall Information Strategy. It is therefore imperative for all specimen-based databases prepared in the Museum (including research databases) to conform to Museum's agreed standards. Prototype software will be developed in-house, but these will be rebuilt by professional programmers after successful trials have been completed.

The collections databasing strategy is to use the prototype Interbase Collections Core Database, as developed by Len Nunn, at the apex. Core data fields have already been decided and approved. The core database will be made available to users of the Internet who will be able to make enquiries about Museum holdings from a single file.

The Museum will work towards the development and adoption of three databases which will contain the complete dataset and support the core database. They will hold Library, Earth Science and Life Science data. At the moment many local software systems are in operation but the Museum reduce these to three systems which will all be compatible with the core database enabling data interchange.

The Library database and Earth Sciences prototype database are at advanced stages of development but the Life Sciences software needs much more development. However, the data dictionary and list of fields are approved. The development sequence of the various modules has also been approved but the timetabling needs to be updated and submitted for approval to the Collections Database Board.

Data Capture

Most Museum collections are arranged such that they act as their own index, in effect they themselves form an enormous physical database. We now need to transfer that data into electronic form to increase its availability and to maximise on its utility. All possible forms of data capture will be explored (typing, scanning, OCR, voice recognition) in order to make data entry as effective as possible. It is

Museum policy to treat data capture strategy in two distinct parts.

The first concerns the short-term strategy to be used for the incorporation of existing machine-readable records and to prevent the problem growing. This can be formulated largely on pragmatic considerations without worrying too much about scientific priorities.

The strategy is that:

a) All new specimens (or collections of specimens) entering the NHM are, and will continue to be, accessioned electronically.

b) All existing electronic data should be transferred to the prototype software resident on Departmental servers as quickly as possible.

The second part of our data capture strategy concerns the retrospective databasing of our registered material. It is fully realised that this will take a considerable period of time to complete and will require very large resources indeed. It is also realised that existing staff resources are not sufficient to make a rapid response to all areas of our collections and it is vital that our efforts are further supported by external resources.

It is Museum policy that the information in our databases will be as accurate as possible. The Museum strategy to achieve this is to carry out rigorous quality control at the time of data entry. It is recognised that this may marginally slow down data entry but data quality is of greater importance than sheer quantity.

Not all taxonomic groups share the same degree of political and scientific interest and it would be better to target certain groups for early completion in order to make an impact and satisfy certain external priority needs. The Multi-Criteria Decision-Making Tool should be applied to help establish clear priorities for the future. Each major taxonomic group at the Phylum or equivalent level should first be prioritised within each Department. Priorities within these most "important" phyla should then be assessed so that our efforts may be concentrated as a short term solution to the larger problem.

Implementation

There will be a Collections Database Project Team established to implement the Policy and Strategy and to report progress to the Board at quarterly intervals. Policy will be kept under review by the Board which will approve targets proposed by the Project Team. It is Museum Policy that at least 20% of our curatorial effort be expended on databasing of all descriptions.

Data Security

It is Museum Policy that all specimen-based databases be regularly archived at weekly intervals and copies kept off-site. It is the responsibility of the Project Team to ensure that archiving procedures are rigorously and regularly carried out following the agreed standards as set out by the Information Policy Group.

NATURAL SCIENCE CONSERVATION IN THE UK – where next?

K.J. Andrew, Ludlow Museum

This paper deals with the aspect of British natural science conservation that I have come to know intimately, geological conservation. I suspect that the situation I will describe for geology is the same or worse for biological conservation.

A total of four geological conservators are currently employed in posts of that designation at the National Museum of Wales, Leicester Museum, The Sedgwick Museum and Bristol Museum in conjunction with the SW Area Museum Service. The Natural History Museum Palaeontology laboratory has a team of five permanent staff and two temporary staff working on tasks that include conservation. The Hunterian Museum, Manchester Museum and Oxford University Museum geology technicians also undertake a limited amount of conservation work.

Should some disaster befall an important geological specimen, your museum acquires a collection in a poor state or you finally get grant aid for that drawer full of things you suspect have pyrite decay, what do you do? These incidentaly are all real examples brought to my attention in the last couple of months.

If you are not one the museums who employ a full time geological conservator and grant aid is involved, a conservator will have to be chosen from the Conservation Register for many Area Services to fund the project, others maintain lists of approved people.

If you are fortunate to be a SW Area Museum Service member, then there is a conservator, working 50% of his time on geological specimens solely for the south west. If you are in SEMS, you will be given my name or Chris Collins name. If your museum is anywhere else, a recent search of the Conservation Register listed myself, a fossil preparator and a peripatetic geology curator who specifically states that only simple cleaning tasks are undertaken. The Natural History Museum labs do carry out some outside conservation work but they are not apparently listed on the register.

In August 1995, I stopped working as a freelance geological conservator and returned to paid employment and am officially now a curator. I am permitted to undertake four weeks of conservation work per year for outside bodies on an income generation basis so my services are not lost entirely.

However, this change needs some explanation and in the light of what I wish to set out, I hope some action can be taken.

In the late 1980s, concern was expressed about the lack of geological conservators in the UK, leading players were Chris Collins, Simon Timberlake and Louise Bacon amongst others. After various aborted starts, funding for a one year internship and support came from the newly set-up Conservation Unit, AMSSEE and the Curry Fund and I started training in November 1989 at the Horniman Museum. A few months later, the National Museum of Wales created a similar training post, along with training posts for Botanical and Zoological Conservators. The NMW posts are now permanent.

My training was extended for a year, with an additional Curry fund grant and an MGC grant to AMSSEE. The second year was spent in Canada working with Rob Waller at the Canadian Museum of Nature and also at CCI. I completed my training contract with three months of work for AMSSEE member museums. After that, my immediate options were unemployment or self employment.

AMSSEE agreed to give me the small amount of equipment that they had supplied during the training period on condition that I became self employed, they also researched museum laboratory space for me in my preferred location. After a period of business training and planning with Birmingham Venture, a training provider to Birmingham Training Enterprise Council, I became self