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Title: Computer-Controlled Data Bank System at the Hancock Museum, Newcastle upon Tyne

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COMPUTER-CONTROLLED DATA BANK SYSTEM AT THE HANCOCK MUSEUM, NEWCASTLE UPON TYNE

Abstract:

In July 1977 a pilot scheme began for the transfer of a small part of the Hancock Museum's geological data onto a computer data-bank. This data was geological site information, collected by a Job Creation team employed by the Northumberland Wildlife Trust. Computer facilities were made available at the University of Newcastle upon Tyne, using specifically the Stamford Public Information and Retrieval System - SPIRES. This new process has been successfully applied to several other aspects of the museum's collections.

There can be little doubt of the very considerable advantages to be gained by handling large amounts of data using a computer system. Large organisations with excessive information have been operating such systems for several years. In the case of the Hancock Museum the existing geological data has already increased in size beyond the capability of a card index system, and of course the accumulation of further data serves only to intensify the problem.

The changeover to a computer-based data bank from the running catalogues which already exist has not only attractions in improving the efficiency of storing existing data, but also allows for more peripheral information to be filed which might otherwise be rejected. Exhaustive cross-referencing to published literature is easily accomplished. Comments of local geologists can be incorporated, a source of valuable information which can so often be lost to all but the immediate geological community.

In July 1977 there was a meeting of the Geological Curators Group on storage of data for the National Site recording scheme, at which several museums discussed plans for using a computer system. Following this, the authors decided to implement the use of the computer to store and retrieve their geological data at the Hancock Museum. Peter Robson had previously decided this would be the best way to handle the Northumbrian site records, collected by permanent and J.C.P. geologists, which are the basis for the development of a National Site Records Centre for Northumberland at the Hancock Museum.

Up to 1976 Museum data had been stored in running catalogues only. A mineral card file was begun by J.C.P. geologist John Mennear, after

a decision not to use IRGMA cards because of the lack of clerical staff. If the Museum was to use a computer system it had to be flexible enough to feed in data almost directly from the current catalogues. When we began to consider the system we were not too certain of the outside demands that might be put on it initially, but we wanted to make internal indexes for sites, fossils, minerals, rocks and bibliography, and eventually to publish an up to date type and figured specimen list of fossils.

Mr. A. M. Tynan the Curator of the Hancock Museum, and Mr. R. Norman, Assistant Secretary of the Northumberland Wildlife Trust gave their permission for a test study to go ahead and Mr. Tynan obtained permission from the Director of the Computer Unit of the University of Newcastle upon Tyne to use the facilities of NUMAC. With this go-ahead we contacted Dr. Nick Rossiter of NUMAC who was to act as our liaison officer.

After discussions on the means of transferring our data, Dr. Rossiter informed us of the arrival in Newcastle of the package called SPIRES (Stanford Public Information and Retrieval System) from Stanford University which had been used successfully in North America for a wide variety of uses. Our data was then structured in a manner to be accepted onto SPIRES and test samples of data were drawn up. Dr. Rossiter then wrote the initial file definition and the data was compiled onto SPIRES.

By September 1977, the tests having been successful, Mr. Tynan received acceptance for the proposal of a Job Creation team to handle the computerisation under the supervision of the authors. It was to comprise one geology graduate and two clerical assistants for 52 weeks. Paul Bootes, a Lancaster graduate, was employed and began to familiarise himself with procedures. Peter Robson continued to deal with site records and Paul Bootes dealt with Museum data and the two main sub-files were made to interconnect, so that one operator can read all records at one time. By October two clerical assistants had begun to put data onto cards and submit it overnight in batch. Paul Bootes then checked data and altered or added to it and compiled it onto SPIRES. To date approximately 4,300 museum and 220 site records are on file.

During the first few months of use, the file definitions were constantly being improved little by little. A major alteration was effected in April 1978 which had markedly simplified the file structures, making data easier to put on and easier to retrieve.

In January 1979 a further grant from Manpower Services allowed for the employment of two further graduates, Ian Webster and Michael Daly and four punch card operators who have become Computer Assistants.

The museum acquired a card punching machine and by May/June 1979 a print-out terminal TTY43 model was installed with University aid at a cost of around £700.

The Hancock Museum Database now comprises the Geological collection data, fossil, mineral and rock catalogues (about 18,000 to date); the geological site information from Northumberland (220 sites), a slide catalogue, the collections of bird and mammal skins, lepidoptera and palaeobotany. Following a meeting of the Natural History Panel of the North-East Federation earlier this year we have also set up a North-east Collector Data-bank to store information on the major collectors of the region, on the lines of the N.W. Collections Research Unit.

Of the collections on file the fossil list is the largest, over 10,000 records. Updating of information is undertaken as and when needed e.g. the location of each specimen in the museum is being added.

The Spires information has already proved very useful in obtaining lists of sites or subjects to answer enquiries, and even for locating specimens in the museum collection. Lists of collectors can be obtained as a source for the Collector file, and specialists in various fields can be given an output of relevant data either before or when they visit the museum.

In the near future the Herbarium and ethnographic collections will possibly be added.

The example of the collation of data from several museums being under-taken for the collector survey could become a more widespread phenomenon as other museums become capable of creating compatible databases using a system such as Spires or the GOS package of M. D. A.

To prove a point the Hancock Museum has become one of the main computer users in the University of Newcastle upon Tyne in under two years, and hopefully this will continue.

The future of the scheme is still uncertain once the Job Creation Scheme ends. The University will continue to allow its Museum free computer time and space. If the bulk of records are stored, then the permanent geologist should be able to add data to the system as easily as normal cataloguing and up-dating. The Museum should be able to afford the back up disc space and tape duplicates. In time we hope to have all our records stored on computer. Cataloguing of the geological collections is almost up to date thanks to J. C. P. graduate assistance. The Museum could then extend the use to the ethnographic, zoological and botanical collections. This would necessarily entail all future Hancock curatorial and possibly technical staff learning the basics of the M. T. S. and SPIRES computer system as part of their initial training.

Acknowledgements:

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A NEW BIRD DISPLAY AT THE HANCOCK MUSEUM

"Incidentally the cheque is for twenty thousand pounds....." the voice at the other end of the telephone was that of John Sisson, a senior partner in a local firm of chartered accountants. He had been explaining that his aunt, Miss K. M. Hancock, for whose financial affairs he was responsible, had just asked him to send me a little something to help with a project to redisplay her great-great uncle John's collection of birds. "Aunty Kitty" an elderly little lady, now living on the south coast, had recently visited her relations in Newcastle and the Sissons had brought her down to the Museum to see the collection and meet me. I had told her of our plans for the modernisation of the displays and how we had a little money from the University Development Trust to spend on the Bird Room. I knew that the Hancock brothers had not been rich and had no reason for believing that their descendants were otherwise, nor indeed that there were any who had any real interest in their illustrious forbears' activities in natural history - I did not even know of the existence of Aunty Kitty. There is a small wonder then that the size of her gift came as a huge and splendid surprise. The immediate question was what to do next?

At that time a major project was being undertaken in the Geology Room, funded by the University Development Trust with staff provided by the Manpower Services Commission. This had demanded the closure of this room and it was decided therefore, to delay the refitting of the Bird Room until it's neighbour was finished and available to visitors. The Manpower Services Commission looked healthy, with every expectation of a long life, so why rush in and reduce even further the value received for the entrance charge by placing yet another major display area out