



NatSCA

Natural Sciences Collections Association

<http://www.natsca.org>

The Biology Curator

Title: Scientific and Didactic Valuation of Movable Monuments of Inanimate Nature in Museum's Geological Collections

Author(s): Jakubowski, K.

Source: Jakubowski, K. (1995). Scientific and Didactic Valuation of Movable Monuments of Inanimate Nature in Museum's Geological Collections. *The Biology Curator, Issue 3*, 9 - 10.

URL: <http://www.natsca.org/article/531>

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) <http://creativecommons.org/licenses/by/2.5/> 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.

programs. Through exhibits, they promote public awareness of nature and biodiversity.

Data centres, libraries, and archives associated with systematics collections also provide an essential resource for research in systematic biology. These specialised libraries are not limited to bound books and periodicals but may also include card indices, catalogues, manuscripts, illustrations and photographs, microfiche records, cartographic information, bibliographic files and different forms of electronic media. The enormous proliferation of scientific information over the past few years can only be met by significant expansion of infrastructure, along with major advances in the storage, retrieval and utilisation of systematic databases.

Ms Nicola Donlon see Professor Stephen Blackmore.

COLLECTIONS ASSESSMENTS AND LONG RANGE PLANNING.

Philip Doughty, Science Division, Ulster Museum, Botanic Gardens, Belfast BT9 5AB

[Abstract awaited]

ACCOUNTING FOR MUSEUM COLLECTIONS

Martin Evans, Head of the Technical and Research Division at the Chartered Institute of Public Finance and Accountancy, 3 Roberts Street, London WC2N 6BH.

This session will consider how accountants will record and value museum collections for inclusion in an organisation's published accounts. From 1 April 1994, local authorities in Great Britain have been required to account for the fixed assets, which include museums and their collections, on a new basis, which brings their accounting practice more into line with that in the private sector. The new system of accounting for fixed assets will require local authorities to compile asset registers and to record all material assets in their balance sheets at cost or current value. In July 1994, the Government published a Green Paper 'Better Accounting for the Taxpayers Money' which will require national collections to be accounted for on a similar ('resource accounting') basis. The session will outline the new accounting requirements, their practical implications for museums, and the guidance available.

Gerald R Fitzgerald see Peter G Whiting.

VALUATIONS - A PROFESSIONALS' VIEW

R.G. Gowland, FRICS, Phillips North West, 43 Cuning Street, Liverpool L8 7NN

Introduction including the essential and important differences between a valuation which is a matter of opinion and a price, which is a matter of fact.

The various reasons for which instructions may be given to value an object, including insurance, whether on the world

open market or locally, probate, family division, sale, other tax purposes, rent.

The factors which influence a valuation including age, rarity, condition, fashion and sub-divisions of the above, all of which are the subconscious factors that the experienced valuer considers before giving an opinion.

Comparative pricing information such as auction records, reference books and retail prices.

Outside factors above and beyond an individual purchaser or valuers control including political embargo, international exchange rates and internal Bank rates.

DEFINING AND DISPOSING OF SPARE COLLECTIONS - AN UNRESOLVED PROBLEM.

Max Hebditch, Director, Museum of London, London Wall, London EC2

Museum collecting can be characterised as "front end", representative objects selected to meet the needs of an educated visiting public; or "scientific", comprehensive sets of objects and data meeting the needs of a discipline. Art galleries, cultural history museums and technology museums are examples of the former. Natural science, archaeology and anthropology museums reflect the latter approach.

The Museum of London, dealing with the history and present state of a great metropolis, follows both approaches to collecting, particularly in relation to the archaeology of early London. Tension between the two raises a range of problems: sampling strategy, priority in the allocation of financial resources, relative scientific importance, cost of the collecting processes, definition and disposal of unwanted material.

This experience suggests that while a financial valuation of the "assets" might be an interesting exercise, it is unlikely to assist the solution of the problems, which require professional judgment and confidence.

SCIENTIFIC AND DIDACTIC VALUATION OF MOVABLE MONUMENTS OF INANIMATE NATURE IN MUSEUM'S GEOLOGICAL COLLECTIONS

Prof Krzysztof Jakubowski, Museum of the Earth, Polish Academy of Sciences, Muzeum Ziemi PAN, 00-488 Warsaw, Al.Na Skarpie 20/26, Poland.

Geological collections in museums play an especially important role for the protection of natural heritage. A considerable part of these collections is gathered because of the necessity to protect valuable finds of unique minerals, rocks, and fossils from classical sites. The fact of their inclusion in museum collections often creates the only chance for the preservation of these invaluable specimens. Many times we are forced by circumstances to transfer a monument from its site of occurrence for fear of inevitable destruction. In Polish museological traditions these kinds of museum objects are defined as so-called "mobile monuments of inanimate nature", different from "immobile monuments of inanimate nature" protected in the natural environment. Both are the subject of direct interest, which is reflected in the research and popularization carried out by natural history

museums, and by some measures taken to provide their active protection.

One of the most important criteria in valuing a museum's geological collections is its significance for the protection of the natural and cultural heritage. The opportunity, if we take it, will also have implications for a museum's collecting policy, including the acquisition and disposal of geological collections as a result of research and educational activity.

The inanimate nature monuments in the world are protected in a different manner, in accordance with the legislation of nature conservation of a given country. They are dependent upon the inherent natural conditions characterizing the particular environments which are also influenced by native traditions, customs and economic, cultural history of the country concerned. Some actual problems concerning inanimate nature conservation protection in Poland will be discussed.

Today, particularly important from a museological view point is the safe-guarding of mobile monuments in various kinds of protected areas and sites. Generally we shall distinguish the following main categories of mobile monuments of inanimate nature:

- collections of specimens from most valuable natural area and sites protected by law in global, regional and local scale (e.g. national parks, nature monuments, landscape parks, documentary sites). Recommendations for safe-guarding in museums of such objects is in the first List of World Heritage Geological Sites Inventory UNESCO (1990). A good basis for of estimation of museum inanimate monuments could be useful studies on the construction of unified criteria network of Sites of Special Scientific Interest (SSSI), Regional Important Geological Sites (RIGS) and other international and national initiatives (e.g. European Association for the Conservation of Geological Heritage - ProGEOL);
- collections of preserved rare or unique geological specimens (minerals, rocks, fossils as well as meteorites) from great scientifically important and classical localities long since exhausted (e.g. old mines, quarries, outcrops). Note that many valuable specimens cannot be collected today and may be only clues to the geology of these sites. It is especially important now, as man modifies the Earth with increasing vigour;
- historical collections connected with names of eminent scientists, discoverers, collectors and history of establishment of natural history cabinets, museums and other scientific centers. These collections represent the cultural and scientific heritage of natural science and science history. Lastly, we must remember - Earth Science moves on and finds new uses for the old material. Museums are still motivated by a quest to decipher the natural world recorded in the existence of the object.

Apart from scientific values, mobile monuments of inanimate nature play an important role in museums educational activity, especially the problem of nature conservation. They are excellent material for educational exhibits. Geological specimens are especially "museable". Display collections of minerals, rocks, fossils are for visitors "the real thing", in other words "natural" nature objects, different from other natural history museum specimens of the recent living world which are only dead objects torn from its natural environment. Possibilities of stimulating the imagination through direct contact with real nature is an extremely essential factor for the popularization of both

natural sciences and the fundamental problems of nature conservation as a basis for preservation of man's natural environment.

CRITERIA FOR ESTABLISHING THE SCIENTIFIC VALUE OF NATURAL SCIENCE COLLECTIONS.

Dr Andrew J. Jeram, Department of Geology, Ulster Museum, Belfast, BT9 5AB

Valuation can be a very subjective process, particularly where there is no established frame of reference or procedure for arriving at a valuation. The philosophical basis of science is one of objectivity. Therefore it should be possible to construct an objective set of criteria for establishing the relative value to science of natural history collections.

The act of collecting is not in itself a scientific exercise, but may be a component of one. Once observations have been made, the preservation of material evidence is only important to science when its loss would prohibit repeated observation of a reported phenomenon, either because the evidence is unique, or re-collection is impractical.

Taxonomy and nomenclature are fundamental to many aspects of the natural sciences. Whilst the stability of nomenclature requires the designation and preservation of type specimens, other material requires preservation when there is, or might in the future be, reasonable doubt about its identity, or observations made from it. Specimens which do not form the basis of published observations have no intrinsic scientific value. However, they may be of value to the process of science, for example as reference material to aid identifications. Potential for scientific study cannot be a criterion for assessing the scientific value of collections, although it may be an important factor in collections management or acquisitions policy.

In assessing the relative importance of natural science collections, the number of type, figured, and cited specimens may be used as a rough guide, but it is reliable only in the case of very large collections. In zoological and botanical collections, counting taxa tends to even out distortions caused by a variety of factors, for example large type series, or differences in practice between scientists. It is assumed that in the eyes of science, all species are considered of equal importance. The following formula may prove to be useful for comparisons if collection parameters are compatible;

$$n = (f - T) (T + g) + R$$

Where T = number of species represented by type material

f = number of species which are figured

g = number of genotype specimens represented

R = number of cited and referred taxa

The formula is weighted to emphasise the importance of certain categories of material and should fairly reflect the value of material in smaller collections. It does not take into account the usefulness of comprehensive reference collections as this would be difficult to measure objectively. As computerised databases become increasingly widespread it should be possible to obtain the statistics required relatively easily. It is hoped that if sound objective criteria can be established for assessing the scientific value of collections, the case for promoting better management and