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The Biology Curator

Title: Microbial Genetic Resources: Their Use and Organization

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Source: Smith, D. (1995). Microbial Genetic Resources: Their Use and Organization. *The Biology Curator*, Issue 3, 15.

URL: <http://www.natsca.org/article/550>

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mutually exclusive? Is a high market value an open invitation to quick deaccessioning for profit? And can the costs of recovery and preparation be fairly factored in to an appraised monetary value? Ongoing legal and political activities spurred by the value of vertebrate fossils will provide some answers, and may set some precedents for natural history valuation as a whole. Examples of the effect of high market values on vertebrate fossil excavation, sales, ethics and scientific data will be discussed.

MICROBIAL GENETIC RESOURCES: THEIR USE AND ORGANIZATION.

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Microbial genetic resources are essentially collected to provide an organism base for future sustainable use. They are maintained to provide reference points for names, representatives of research and patent strains, organisms used in industrial production processes and organisms for screening and research. The discovery of new natural products with properties of relevance to humankind stimulates the collection, isolation and storage of organisms. There are 481 collections worldwide registered with the World Data Centre for Microorganisms but they hold only a small percentage of the microorganisms known to man. There are several organizations that support collections but there is some way to go before a coordinated policy is put in place. There is a growing awareness of this problem and the need to have a comprehensive inventory of microorganisms. The present microbial resource collections have been established on an *ad hoc* basis and currently do not appear to be capable of adequately conserving the vital world resource. In the fungi various estimations have been made of the numbers of species: 1.5 million is one suggested figure, of which 72,000 are described and yet only c. 11,500 are held in collections. There are around 1,700 new species of fungi described annually. The task is enormous; exploration of as yet unexplored environments is yielding large numbers of new species. Microorganisms can be collected without depleting natural populations and maintained in relatively small laboratories. However the task of maintaining representative collections of microorganisms cannot be left to chance. *Ex-situ* conservation of microorganisms has an essential role to play in making available this enormous resource for future use and benefit to mankind.

NOTES ON THE QUALITY AND ECONOMY OF A NATURAL HISTORY COLLECTION.

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Using the Department of Botany of the Moravian Museum in Brno (Czech republic) as an example, possible ways to enhance the quality of the botanical collection are suggested. This could be achieved only by higher demands on newly obtained material. A new approach to old preserved material would also be advisable. The full use of computers in museums and new attitudes to museum

material documentation generally would be profitable as well.

From the financial point of view the highest demands in the botanical collection are made by the wages, which amount to over 75% of all expenses.

A SCIENTIFIC/HISTORICAL/EDUCATIONAL HERITAGE FOR WHOM?: THE VALUE OF GEOLOGICAL COLLECTIONS IN A SMALL MUSEUM.

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How much do we value our heritage of natural science collections and on what basis or assumption do we collectively make this valuation? I would anticipate that there is currently plenty of discussion on the issue of their monetary value. For instance, old 'museum' specimens of fossils, reptiles in particular, are now beginning to command high prices in the auction houses. There is also the matter of their insurance and undoubtedly this will also be the concern of many of those people attending this conference. However, there is another common approach and that is that of the scientist. Indeed, such is the weight of this opinion that one is unlikely to find many willing to disagree with this rule-of-thumb yardstick of measuring a specimen's worth by its value to science. However, both of these approaches worry me.

A debate carried out between scientists, dealers and valuers alone offers little in the way of help and encouragement to those fighting to keep specimens of moderate scientific or historical importance within the context of the small local museums where they belong. The situation is even worse for those of us engaged in trying to raise enthusiasm and support for the other 99% of specimens not perceived to be of national or local importance, or of any financial worth whatsoever. Reports dismissive of the value of some of these collections, or else the plundering of these same collections for specimens 'in order to safeguard items for research', has helped contribute, as much as has ignorance and the lack of funding and specialist help on the ground, to the disintegration and present appalling demise of small museum collections. It is vitally important that we should now be seen to be sending out the right messages. In the great majority of cases all of a collection has a value.

There is no inherent reason why a TYPE specimen should be seen as any more **worthwhile** an object to be cared for than an unlocalised mammoth's tooth or ammonite which is popular amongst visitors and regularly used in a handling collection. What is absolutely essential however is that both are managed and used in the right way. The irony is that it is so often the moderate to poorer quality material which proves to be of the greatest practical value to visitors.

This paper argues for a broader based approach to this problem which would be designed to safeguard the future of natural science collections in situ within small museums.