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MUSEUMS

Neglected keys to environmental understanding

BY JORIS KOMEN

"All over the world museums act as storehouses for artefacts, objects and specimens representative of human culture and the environment. Most museum visitors never see these collections; they only see the limited items presented in public exhibitions ... people seem to know little about the value of these collections and how they are used." (Sven Mathiasson, Gothenburg Natural History Museum, Sweden)

NE of the museums' most important scientific contributions, biological systematics, provides us with a fundamental understanding of the diversity and evolutionary relationships of animals and plants. It is the science upon which all biological research and development is ultimately founded. Biological systematics is concerned with research on living systems and life-forms, using a host of sophisticated techniques in the field and laboratory. It is essential to investigations at all taxonomic levels, and can provide insight into the delicate relationships and inter-dependencies of organisms.

The National Museum of Namibia is the only institution actively and professionally involved in biological systematics research of Namibia's fauna; indeed, the institution is well placed to do so with huge natural history collections (see box).

Biodiversity conservation programmes demand greatly enhanced knowledge and understanding of the composition of ecosystems. The detection of environmental change is dependent on a comprehensive understanding of effective bio-indicators. Importantly, the recognition of bio-indicators involves substantial inputs from the expertise and natural history collections found in museums and herbaria. These collections and their inventories are vital in providing fundamental biodiversity information. They also play an important role in environmental impact assessments. Accordingly, if biodiversity conservation programmes are to be accountably legislated and implemented in Namibia, the National Museum will need to play a front line role in identifying natural heritage materials which warrant protective

legislation. It would be beneficial to have a well-informed society which recognises, endorses and supports the National Museum's custodianship of natural heritage.

Many natural history collections in Africa are under-utilised, undocumented, obstinately ignored or simply forgotten. This is not unique to Africa or the developing world at large; indeed, a classic example is the British Museum of Natural History which has become one of London's hottest tourist attractions, but has concurrently lost all its credibility as one of the world's scientific powerhouses. African museums are isolated, enjoying only limited local, regional and international contact and scientific collaboration. In many instances these relationships are based on short-term supply and demand initiatives, primarily the result of locally curtailed financial, logistic and, especially, intellectual support. Although short-term initiatives may seem attractive, we should rather be implementing long-term institutional mechanisms to facilitate the supply of expertise from developed countries, and furthermore, enhance and optimise the use of such capabilities already in place in Namibia. Local, regional and international operational partnerships, based on mutual interest in museum-based material, information and research resources have become increasingly viable as a result of improved means of communication and, in particular, the rapid transfer of information made possible by computer technology. It follows that museums are increasingly able to provide appropriate support and facilities for research, training, technological exchange and public education. It is expected, in the

Collections housed in the National Museum

History

Independence 4 000 objects 6 000 objects Cultural history 5 000 objects Ethnology 350 000 objects Archaeology 3 500 site records Entomology 750 000 + specimens

Arachnology

(including Myriapods) 100 000 specimens 23 000 specimens Aquatic invertebrates Lower vertebrates* 14 000 specimens

Ornithology

Anatomical, skin,

11 000 specimens skeleton

Audio and/or visual

20 000+ recordings

Bird reprint or

bibliographies 3 000 40 000+ specimens

Mammalogy Faunal tissue (DNA)

2 000+ tissues or extracted DNA

samples

* Ichthyology, herpetology, amphibians

near future, that the National Museum of Namibia will have enhanced library resources and computer facilities, as well as pro-active in-house training programmes for museum-trainees in the humanities and natural sciences. Ultimately, museums should evolve beyond pandering to myopic public voracity for exhibition and display and rather define themselves within the context

of their substantive and abiding role in the responsible service of society.

To satisfy future environmental conservation needs, we have to continue developing our own biological systematics resources. Such resources are characteristically institutionally based, and the National Museum of Namibia has devised a regional museum network initiative to redress the present lack of access to biological systematics resources in the region, based on institutional cooperation. Critically, the National Museum of Namibia now has a greater than ever responsibility in the promotion of environmental awareness, sustainable use of environmental resources, and the abolishment of selfish practices of exploitation such as the trade in wildlife and cultural heritage. Greater collaboration between the National Museum and heritage protection agencies, and appropriate legislation, will ensure that future generations will benefit from, and enjoy, the national heritage of Namibia.

There is considerable concern, both in southern Africa and abroad, about biological systematics, and about the future of such research at museums. This concern stems from the challenge to document the diversity of life before many species become extinct, lack of exposure of students and the public to biodiversity, and the diminution of the role of museums in such fundamental research. This is complicated further by the fact that museums are often perceived as intellectually stagnant, even anachronistic, institutions.

A profile of the National Museum of Namibia

Cultural heritage and archaeological collections were established by the Scientific Society of South West Africa in 1925. These collections were incorporated into the National (State) Museum in 1957, which is presently governed by the Directorate of Arts and Culture of the Ministry of Basic Education and Culture. The museum collections expanded and diversified from 1962 and now include cultural and contemporary history, ethnology, archaeology and diverse natural history collections. The current collection holdings of the museum are estimated to be more than 1,5 million objects. The Museum has three main locations in Windhoek, the Museum Acre with the bulk of collections, research laboratories, offices and stores, the Owela display centre with ethnography and science displays, and the

Alte Feste display centre with history displays and collections.

The National Museum has a very strong project emphasis, with many projects supported by non-governmental agencies. It plays particularly important roles with respect to archaeological and biodiversity research, and the standardisation and computerisation of museum collection inventories in Africa.

Prior to Namibia's Independence in 1990, each collection had one or more curators. Since then, the staff has decreased from 19 curators to eight curators in 1995. Under these circumstances the computerisation of collection inventories has become essential. Except for the two largest collections, archaeology and entomology, all collection inventories have been computerised.