



NatSCA

Natural Sciences Collections Association

<http://www.natsca.org>

The Biology Curator

Title: Report on the study visit to Leiden

Author(s): Taylor, M.

Source: Taylor, M. (1995). Report on the study visit to Leiden. *The Biology Curator, Issue 2*, 11 - 12.

URL: <http://www.natsca.org/article/580>

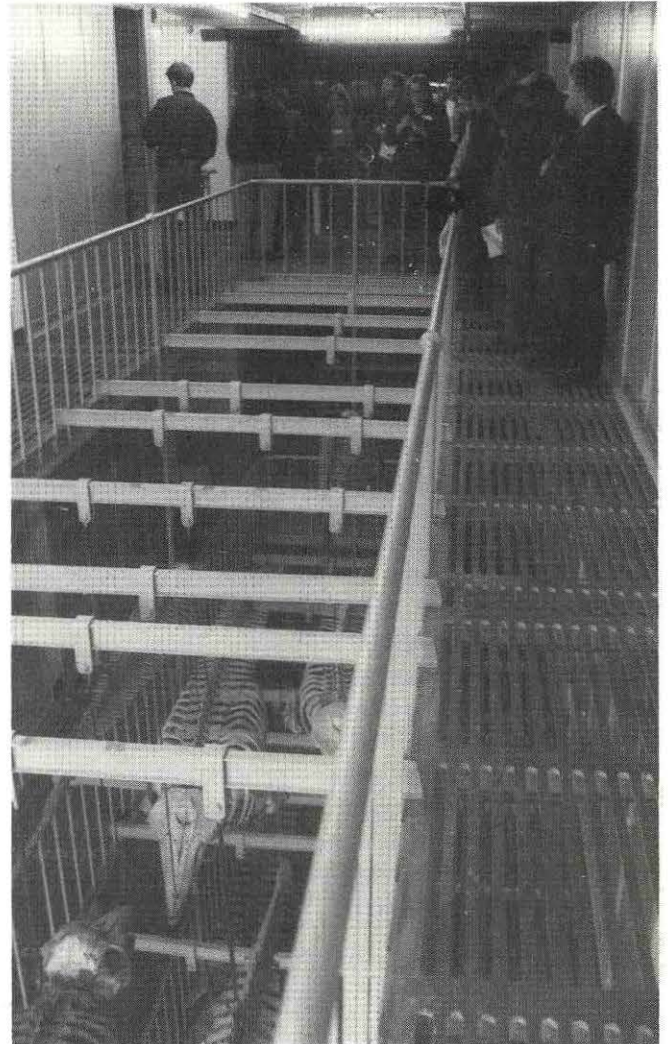
NatSCA supports open access publication as part of its mission is to promote and support natural science collections. NatSCA uses the Creative Commons Attribution License (CCAL) <http://creativecommons.org/licenses/by/2.5/> for all works we publish. Under CCAL authors retain ownership of the copyright 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.

crustacea, molluscs (including a cypraeid and nudibranch), corals, and anemones in profusion. My favourite was a small octopus. Because of the wealth of visual experience in the aquarium we never made it to the zoo, so all I can say is they have antelopes, 'cos I saw them from the Library window in the morning.

At 1600 hrs we had a talk from Agnes Brokerhof, of the Central Research Laboratory for Objects of Art and Science, on "Conservation problems and how we cope in Holland". Her starting point was the Madrid Congress of 1992, from when it was felt that the time had come to focus attention on natural history collections. There is a Dutch group for the exchange of information on the conservation of dry NH collections, and a Working Party on wet collections is based in the Amsterdam Dept. of Pathology. At present still "determining priorities". Agnes has a project on storage materials, with a growing database of available materials and test results. She strongly emphasised the importance of good and bad microclimates within sealed containers. Much of this work applies to ethnographic objects also. At present the Rentokil bubble is the fumigation method of choice, but Agnes' team are trying to develop a nitrogen based system with a local (and cheaper) firm. Freezing seems effective for e.g. paper and organic materials. Leiden has done work on adapting commercial vacuum cleaners to cleaning taxidermy mounts. Her major point was that NH collections are now an 'issue', and that this represents an advance. At the reception afterwards I chatted to her and asked that the materials database be made available on the Internet, an idea she seemed receptive to, and promised to follow up.

Then Dr. Ronald Schliesh gave us a talk about the European Taxonomic Institute [ETI], a UNESCO related organisation. He started from the 'Biodiversity Crisis' and pointed out there is also a crisis in the supply of information to counter the biodiversity crisis. Information is needed about organisms and about their distribution. ETI is attempting to bridge this information gap. The goal is the World Biodiversity Database, on which presently 1.4 million organisms are described. However, one needs to know the name of an organism before accessing the database, and therefore ETI is developing also unique, non-specialist useable identification tools, especially using computers. For the biogeographic information a program called MAPIT is used, and a separate package LINNAEUS II is being distributed (free) to cooperating scientists, so that taxonomic information can be recorded in a consistent way for adding to the database. He also demonstrated ETI CD-Rom products, notably 'Birds of Europe' which combines pictures, text, calls (with sonograms) and flight patterns into a multimedia presentation; this currently contains some 420 species.

We were then treated to a wine and cheese reception, and had the chance to meet various other members of staff. Finally arrived at our (very comfortable - well done Kathie) hotel about 1800hrs for a welcome shower, then



Vertebrate storage, Leiden.

out for a meal amidst the fascinating sights of Old Amsterdam (over which I draw a veil, but upon which I am assured our Honourable Chairman is an authority, having lived in Holland for six months some years ago).

All in all a tiring but most illuminating visit.

Report on the study visit to Leiden

Friday November 4th 1994

Michael Taylor, Perth Museum and Art Gallery

The second day of BCG's continental foray saw the coach retracing its route south for forty miles to the university town of Leiden to visit the National Museum of Natural History (NNM) and the Rijksherbarium.

Originally founded in 1820 as the 'Rijksmuseum van Natuurlijke Historie' the NNM had the explicit objectives of exploring the zoological and geological resources of overseas territories and providing an educational resource to the public and specifically to the University of Leiden. The first director was the famous C.J. Temminck and he inherited several older 'cabinets' to form the basis of his

museum. These were quickly augmented by much field collecting, particularly in the Far East, and the museum now houses some ten million specimens in five scientific departments. About 60 staff run the collections side of the museum out of a total staff of 140. Unusually, the museum does not have any displays at all at present. This year the museum will become an autonomous Foundation whilst retaining close links with the University.

There is much activity behind the scenes at the present time for, just as at Amsterdam, a new museum building is about to happen. At the moment the NNM is housed on six different sites including the former municipal orphanage and a plague hospital. The new building, which will be adjacent to the 17th century plague hospital, will bring all of the collections under one roof or, strictly speaking, into the same tower. For, in contrast to the underground store at the Museum d'Histoire Naturelle in Paris which we visited a few years ago, Leiden has opted for a 21 storey tower 20m x 20m, subdivided to give 44 compartments each of 200 sq metres. There will be no windows and no internal services - these have been confined to within the double insulating walls. The area will include display space and a 'Treasury' room containing specimens of 14 species of extinct birds and 11 species of extinct mammals which visitors can view through a screen of bullet-proof glass. A space has (theoretically) been incorporated to allow for a 10% expansion of the collections.

The need for the new building was one of the many highlighted by the 'Delta' project. This started life as a Dutch government audit office survey into the state of museums / archives / heritage. The report highlighted problems which are probably familiar to us all: poor accommodation, poor documentation, alarming storage conditions, poor environmental control, insect infestation and mildew (a particular problem of the Dutch climate). Approximately 1.5% of the nation's 51km of archives were already beyond salvage. 'Delta' is in effect a short, sharp shock or one-off injection of resources to enable museums to get on top of the problems and hopefully once there to stay on top of them. By the year 2000 £27 million will have been put into improving preventative conservation, £57 million into active conservation and £50 million into restoration. In order to determine priorities, collections have been categorised into categories A-D: category A collections contain material which is irreplaceable, invaluable, has a standardising function or a symbolic historical value; category B have a high attraction value, a high exhibition value, collection value or documentary value; category C contains 'others' while category D collections are deemed to have no value to a national museum. 22% of collections were classed as As, 44% Bs, 32% Cs and 4.5% Ds (Yes, I know that it doesn't add up!). Priority projects deal with the As and Bs. The registration backlog should be eliminated by 1997 and all conservation done by 2000 - then the cash stops.

Spectacular evidence of the effectiveness of Delta was visible during our tours of the stores. Using a modified vacuum cleaner with a fungal spore-proof filter, drastic improvements were being made to the condition of the 100,000 mounted birds in the collection at Leiden the colours of which, after cleaning, were truly stunning.

The storage areas were breathtaking in a different way if you were not too comfortable with heights. Four storeys of mesh floors could easily bring on an attack of vertigo to the unsuspecting visitor and if you dropped your pencil a long walk followed. These open floors were designed to allow good air circulation in a damp climate and they certainly seem to work. They also of course allow undesirable insect pests unlimited access but UV traps were much in evidence and regular fumigation had the problem under control.

After a substantial lunch kindly provided by our friends at Leiden, we walked a little way to the Rijksherbarium. Although founded in 1829 it is now combined with the Leiden Botanic Garden which was founded in 1590. The combined institution has 18 scientific staff and 15 PhD students. The herbarium is currently housed in the old university library but it too is shortly to move to a new location, this time converted from a modern office building. It has four areas of research activity: the plant biodiversity and historic biogeography of S.E.Asia; floristic changes in the Netherlands; cryptogamic botany and comparative morphology.

The collection's 4 million specimens are contained in 70,000 6 inch deep boxes on roller racks. There are two walk in deep freezing rooms which are used in rotation to enable the entire collection to be frozen to -30°C every eighteen months. This has not eliminated insect pests but it has kept the problem well under control. 35,000 new specimens are added to the collection each year.

All pre 1800 specimens are house in a special room and the highlight of the day for me was to see a sixteenth century collection in the form of a *hortus siccus* in perfect condition and with its hand coloured title page positively glowing and unfaded.

My major impressions of the visit were to marvel at the treasures of these extensive collections and to realise, as we did in Paris, that many if not all of the problems in the collections are ones which we face here too. There is certainly more scope for the sharing of solutions to these problems - with limited resources we should not be reinventing the wheel.

I greatly enjoyed my visit though the flatness of the Dutch landscape is more than made up for by the number of stairs in its museums. If it is not saying the obvious once more, my best wishes go to our kind hosts in Leiden and I am sure that all BCG members will make them very welcome should they ever return our visit.