

## How to Deal With the Unrenewable Status of Animal and Plant Specimens Such As "Out of Print" and "Degeneration"

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**Abstract:** Combined with the current status of animal and plant specimens of China National Museum, this paper analyzes the crises facing biological species in modern society, and makes in-depth constructive proposals for the continued collection and protection of museum ecological specimens from the perspective of survival and development.

In the long historical process of biological formation, a lot of valuable heritages with historical culture and other leftovers have been left [1], and these witnesses of life development have formed an irreplaceable and non-renewable nature under the scouring of history. Cultural relics, these cultural relics are a symbol of the progress of human civilization, but also a voice in the history of the development of human civilization. As an ecological specimen of the Natural Museum in the "soul" position, it has always played the most important role on the science popularization both in many years of exhibitions, research and practical activities. It can be said that the existence of biological specimens is necessary evidence to extend the life cycle, interpret and grasp life information. And through the historical appearance and real data conveyed and reflected by these specimens, all of us burst forth with great enthusiasm for social evolution and epic progress in our human material and cultural life.

Collection storage work is an important link in the work system of the Natural Museum, which is not only the basis for the museum's work, but also the most critical guarantee in the museum's display and exhibition work. Judging from the current museum industry, regardless of its size, it will be dedicated to the basic construction of the warehouse, and will be equipped with an exclusive cultural relic warehouse as a storage space for the collection. However, from the current situation, with the continuous increase of collections, most of the cultural relics in the museum industry in China have insufficient problems, resulting in some cultural relics can only be stored by stacking, which cannot be effectively To meet the requirements of different cultural relics with different conditions and methods for storage. The Natural Museum is a cultural institution that collects, collects, displays, and studies cultural heritage representing natural and cultural heritage [2], and classifies those that have scientific, historical, or artistic value, and provides the public with knowledge, education, and appreciation. [3], the representative objects are usually called "specimens" and the most common and most exhibited are animal and plant specimens, which are organic substances and are most susceptible to damage due to temperature, humidity, light, insects and microorganisms. With the World Environment Organization's protection measures for wild animals and plants, especially those endangered and rare species, and the further regulation of the cultural relic market, it is quite difficult to continue to collect those precious animal and plant specimens. The storage of original animal and plant specimens is a matter of urgency for the Natural Museum. It is necessary to protect the specimens of endangered species. It takes more effort to store the specimens of the endangered species and to delay their lifespan. The storage problems of existing collections and the new storage methods and technical standards that can retain the existing rare, non-renewable animal and plant specimens, thoroughly buffer and resolve the current status of "out of print" and "chronological" of animal and plant specimens.

## **1. Scientific management of specimens**

### **1.1 Classification of specimens [4]**

Arrange the specimens according to the scientific classification method and place them in the same family or in the same frame. In the process of placement, the development goals of the venue of the library, the difficulty of obtaining animal and plant specimens, and the subsequent collection of animal and plant specimens should be considered. Leave reserved space and each specimen must have a unique location code.

### **1.2 Temperature requirements and control**

Animal specimens are organic matter, and the skin of the specimens has a small amount of residual fat. Excessive temperature will evaporate the antiseptic insecticide used under the skin of the specimen. The way to control the temperature is to install air conditioners in the warehouse, set the temperature at about 18 degrees Celsius, and place a thermometer for easy observation and recording, and also install an exhaust fan to regularly ventilate and ventilate.

### **1.3 Humidity requirements and control**

Animal specimens are generally made by traditional techniques, and the internal fillers are mostly wire, wood chips, straw, cotton, etc. When the temperature of the specimen storage environment changes, the expansion fraction of the internal fillers causes the specimen to deform. Damage, especially in relatively humid environments, can easily cause mildew and damage specimens. The method of controlling humidity is to install a dehumidifier and a hygrometer, observe and record the humidity regularly every day, and check the specimens regularly.

### **1.4 Strengthen the prevention and control of light, dust, mildew and insect pests**

Perform routine inspection and sorting of specimens in accordance with scientific management standards. Once a loophole is found, an emergency plan is immediately taken to report, deal with, and remediate as soon as possible to minimize the possible damage to specimens.

### **1.5 Use advanced specimen storage equipment to control the quality of the warehouse environment**

As the concentration of pollutants in the warehouse is high and the humidity fluctuates greatly, in order to stabilize the humidity of the warehouse, reduce the concentration of pollutants in the warehouse, protect these precious specimens, and promote purification on the basis of environmental monitoring-humidity control integrated machine, combination Type constant temperature and humidity specimen security storage equipment, air curtain and air clean screen.

### **1.6 Add handheld environmental monitoring equipment**

In modern society, air pollution is serious, carbon dioxide, sulfur dioxide and other harmful gases, dust, coal dust, soot, metal powder, pollen and sand, etc., ultraviolet rays and infrared rays in the light, the air humidity is too high or too low. Can speed up the damage of the specimen. For museums, the temperature of the warehouse depends largely on the temperature of the air outside the warehouse. Due to safety issues, staff needs to enter and leave the warehouse many links, personnel and related procedures, so enter the warehouse from time to time. It is impossible to check the temperature and humidity at any time. The environmental monitoring and control system in the warehouse urgently needs to be added and updated in order to realize the monitoring and improvement of the environment in the warehouse and raise our preventive protection work to a new height.

## **2. Restoration of large animal specimens**

It is recommended that the China Museum Association can coordinate the application of the World Museum Association to the animal protection organization, and use the “just needed” and

“collection status” queuing methods to strive for effective cold storage by the Animal Protection Association when obtaining information on the death of rare large animals. Means and inform the World Expo Association so that the Association can effectively subscribe and distribute according to the evaluation results of the respective museums.

### **1.7 It is proposed to hold a "Sample-making Skills Innovation Workshop" in the Chinese museum industry**

Employ those who have achieved excellent results by means of graduation and screening, and form and form a stable, efficient, and unique large-scale specimen toughing team. Whenever a large-scale animal entity purchases or intends to purchase a large animal entity to make a specimen All reports to this team, according to the current situation and the intention of the purchaser, give a research and production plan, when team cooperation is required, actively respond and go to the site together. This allows the "building, sharing, invoking, peculiar" team elements to be fully displayed and played to the greatest extent.

### **1.8 Improve the repair methods of animal specimens**

The vertebrate ecological specimens are elaborately made using a variety of filling materials using the vertebrate body (except the eyeball). It not only completely and truly retains the color of tissues, organs and bare hairless, feather parts on the surface of the animal, but also vividly shows the instantaneous posture of the animal's life and the corresponding posture of this posture. The morphological structure of muscles and bones in various parts of the body [5]. When restoring these large animal specimens, they must retain and maintain their original ecological appearance. Then, when selecting the restoration material, it should be as close as possible to the original raw material when it was made, but there are requirements when picking the material-the hair and feather are particularly plump and smooth.

### **1.9 Continuous development of cleaning techniques for fur animal specimens**

A good animal specimen is also an exquisite artwork. However, due to factors such as specimen storage and maintenance, a long time will cause a lot of dust in the air to fall on the surface of the feathers and hairs of the specimen. These dusts will always mix, absorb part of the moisture in the air, and act as an insect repellent and specimen. Part of camphor oil from camphor put together. As a result, the dust falling on the specimen forms a certain viscosity and continuously penetrates inward. Over time, the surface of the feathers and hairs of the specimen will be contaminated into gray and black, so that it will lose its luster, and serious pests, microorganisms and other corrosive substances will also be produced. At present, the most effective cleaning method is to prepare white towels, tweezers, hair dryers, and sprayable ionized water vapor generators; the cleaning materials are brand-name dry cleaners, 95% ethanol, and water, and they are used according to the most appropriate ratio [6].

## **3. Establish animal specimen image database and build 3D holographic image production team**

We know that as long as the normal development of human society is a criterion, then all historical traces should be preserved, and the role of the museum is particularly significant and important. It will use its unique function to speak for history. However, with the passage of time, any form that uses physical objects as historical archives will decline. When the limit of specimen storage comes and the gradual extinction of the organisms that can collect specimens, the function of the museum as the main body of the "exhibition" is bound to be So lost. The traditional definition of "collection" and "display" that follows the museum's specimens will also be completely subverted, and it will be replaced by scientific and cutting-edge technological revolution after all. As far as the current collection technology of the world museum industry is concerned, the establishment and development of the museum image database and the construction of the 3D holographic image production team are undoubtedly the most important link towards the future. [7].

### **1.10 Explore the hierarchy of digital museums**

Networking is the carrier and basis for museums to use advanced technologies and achieve their goals [8]. The advancement and practicality of the design of the network is an important part of the design of the weak current system of the entire museum. Considering its advancement and expansion, the new technology should maintain its compatibility. [9] And greatly reduce operating costs and improve overall efficiency.

### **1.11 The construction of virtual local area network and wireless local area network**

Due to the large number of users with limited network resources and the scattered use range, it is impossible to manage all network users using the same rules, nor can it be used individually for each user [10]. Using VLAN technology to establish switch and router functions will greatly improve the management functions of network planning and reorganization. The wireless network should cover the entire work area and exhibition area, set up a network access point (AP) to ensure network coverage and signal strength, and maintains the stability of the wireless signal.

### **1.12 Feasible means of digitizing collection information.**

According to the analysis of the specimen information, determine the registration points of the collection information type to describe, collect, organize, and enter, and use the B/S structure to develop the collection information management system. First of all, the collection information description and description are improved, and then the plane image of the specimen is taken, and then the second is to focus on the three-dimensional animation production technology.

### **1.13 The application of depth-of-field perception technology in the digital construction of museums.**

Using technical means to simulate the realization of human binocular stereo imaging, including computer graphics, the establishment of simulated scenes, geometric calibration of virtual cameras in CC drawing software, image drawing and other specific technologies and methods.

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