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# CHAPTER 7

## **PRESERVATION PROGRAM IN ARCHIVE**

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## **Content:**

1.0 Definition

2.0 Planning preservation program

2.1 Importance of Preservation Management

2.2 Steps in Preservation Planning

3.0 Deterioration factor and methods of control

## **Course Outcomes:**

Identify the needs in planning preservation program.

Understand the deterioration factors and methods of control

## 1.0 Definition

**Preservation:** A term referring to the passive protection of archival material in which no physical or chemical treatment to the item occurs.

**Conservation:** The intrusive protection of archival material, by the minimal physical and chemical treatments necessary to resist further deterioration, which will not adversely affect the integrity of the original.

IRMT, 1999

## 2.0 Planning for preservation programme

Concepts of preservation programme consists of:

- 1) Preservation planning is **essential** to good records and archives management.
- 2) It is better to **focus on preventive preservation** measures and ensure adequate environmental and physical controls than to focus on conservation treatments for one object to the exclusion of others in the institution.
- 3) Preservation **should operate as part of the overall** management of the institution.
- 4) Preservation **policies and plans need to be coordinated** with other organisational requirements

## 2.1 IMPORTANCE OF PRESERVATION MANAGEMENT

Good preservation practice is required throughout the institution. The importance of preservation programme are:

- 1) cost-effective way to protect records
  - to protect records and archives is to ensure the good and orderly physical and administrative management of the entire organisation
- 2) selection of good quality equipment
  - quality equipment in offices or repositories (boxes, trolleys, ladders or steps) will result in a good service, which not only assists the users but also minimises the damage done to the records or archives as a result of their being used.

- 3) repair of damaged materials
  - bearing on the physical condition of the archival materials for repair. The physical protection of materials is considered in the overall planning process
- 4) set standards for preservation activities
  - set standards for a whole range of activities within the archival institution and the rules for handling original material by staff or researchers
- 5) physical care and protection of records and archives
  - input into decisions about types of paper or folders used, on the construction or adaptation of records storage areas, particularly archival buildings or records centres , and on the way in which files are stored throughout the organisation

## 2.2 STEPS IN PRESERVATION PLANNING

Preservation encompasses many activities, including;

- 1) conducting a **preservation survey** to assess the present state of care of records and archives
- 2) transferring and **accessioning** selected records
- 3) **storing** material properly
- 4) maintaining **environmental conditions** suitable to the material stored
- 5) providing accurate and detailed **means of access** to avoid overhandling of archival materials
- 6) **handling** material carefully
- 7) maintaining good **housekeeping**
- 8) deciding whether damaged material should be copied in some way or sent to **conservation**
- 9) maintaining **disaster control** plans.

### 3.0 Deterioration factor and methods of control

Deterioration Factors	Explanation
Chemical	<ul style="list-style-type: none"><li>▪ unwanted constituents at the atmosphere such as oxides of carbon, sulphur, nitrogen and hydrogen sulphides</li></ul>
Biological	<ul style="list-style-type: none"><li>▪ bacteria, viruses, fungi, other microorganisms and their associated toxins. They have the ability to adversely affect archival materials in a variety of ways</li></ul>
Environmental	<ul style="list-style-type: none"><li>▪ Humidity, temperature, light and air-borne pollutants that contribute to the deterioration of archival materials.</li></ul>
Physical	<ul style="list-style-type: none"><li>▪ a deterioration cause by casual attitude of the archives staff as well as the users</li></ul>
Natural	<ul style="list-style-type: none"><li>▪ natural phenomenon that might have a negative effect on humans or the environment. For example Fires, floods, storms, earthquakes, etc</li></ul>



## Deterioration factor and causes

Deterioration Factors	Causes
Chemical	<ul style="list-style-type: none"><li>▪ Acidity</li><li>▪ Atmospheric gases</li></ul>
Biological	<ul style="list-style-type: none"><li>▪ Fungi</li><li>▪ Mildew and mould</li><li>▪ Bacteria</li></ul>
Environmental	<ul style="list-style-type: none"><li>▪ Temperature and Relative Humidity (RH)</li><li>▪ Light</li><li>▪ Fire and water</li><li>▪ Air pollution</li></ul>
Physical	<ul style="list-style-type: none"><li>▪ Negligence</li><li>▪ Rough handling</li><li>▪ Vandalism</li><li>▪ Inappropriate conservation treatment</li></ul>
Natural	<ul style="list-style-type: none"><li>▪ Fires, floods, storms, earthquakes, etc</li></ul>

## Methods of control (Chemical)

Causes	Method of control
<ul style="list-style-type: none"><li>▪ Acidity</li></ul>	<ul style="list-style-type: none"><li>▪ Store archival materials in <u>acid-free containers</u></li><li>▪ Using <b>acid-free storage materials</b>.</li><li>▪ <b>Remove all clips, staples, pins, string, tape, and other extraneous items from archival material</b>; these may be acidic or rusty. (Use plastic or stainless steel clips if necessary).</li><li>▪ Use metal shelving whenever possible</li></ul>
<ul style="list-style-type: none"><li>▪ Atmospheric gases</li></ul>	<ul style="list-style-type: none"><li>▪ Use quality of any specific piece of paper. When archival materials are acidic to begin with, poor environmental conditions can easily affect their stability and longevity.</li></ul>

## Methods of control (Biological)

Causes	Method of control
<ul style="list-style-type: none"><li>▪ Fungi</li><li>▪ Mildew and mould</li><li>▪ Bacteria</li></ul>	<ul style="list-style-type: none"><li>▪ <b>Check incoming material</b> for signs of insects before it is placed into storage.</li><li>▪ Store <b>infested items away</b> from other archival material until they can be cleaned.</li><li>▪ <b>Never eat or drink</b> in the storage or research areas.</li><li>▪ Keep the archives clean and <b>uncluttered</b></li><li>▪ <b>Eliminating dark, warm corners</b> perfect for nesting</li><li>▪ If necessary, set <b>traps or poisoned baits</b> to catch rodents.</li><li>▪ <b>Fumigation</b></li><li>▪ Install <b>temperature</b> and <b>humidity</b> controls</li></ul>

## Methods of control (Environmental)

Causes	Method of control
<ul style="list-style-type: none"><li>▪ Temperature and Relative Humidity (RH)</li></ul>	<ul style="list-style-type: none"><li>▪ install a <b>thermometer</b> in <b>each room</b> in the archives (to <b>indicate</b> any <b>fluctuations</b> over time and give you a clear idea of the <b>quality</b> of your <b>storage facilities</b>).</li><li>▪ Check the temperature regularly, keep a <b>record</b> of the <b>daily temperatures</b></li><li>▪ Use a <b>hygrometer</b> to measure relative humidity</li><li>▪ install <b>fans</b> to <b>circulate or cool air</b></li></ul>

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<ul style="list-style-type: none"><li>▪ Fire and water</li></ul>	<ul style="list-style-type: none"><li>▪ destruction caused by water and fire is not common but accidental</li></ul>
<ul style="list-style-type: none"><li>▪ Air pollution</li></ul>	<ul style="list-style-type: none"><li>▪ use devices such as <b>humidifiers</b> and <b>dehumidifiers</b></li><li>▪ avoid using original items in displays or exhibits</li></ul>

## Methods of control (Environmental)

Causes	Method of control
<ul style="list-style-type: none"><li>▪ Light</li></ul>	<ul style="list-style-type: none"><li>▪ use blinds to cut out sun</li><li>▪ store archival materials away from light</li><li>▪ keep the lights off or low</li><li>▪ install ultraviolet filters over fluorescent lighting</li><li>▪ Replace fluorescent lighting with incandescent lamps</li><li>▪ wrap materials in archival tissue and box them in lightproof containers</li><li>▪ Monitor light levels regularly</li></ul>

## Methods of control (Physical)

Causes	Method of control
<ul style="list-style-type: none"><li>▪ Negligence</li><li>▪ Rough handling</li><li>▪ Vandalism</li></ul>	<ul style="list-style-type: none"><li>▪ Handle archival materials as little as possible.</li><li>▪ Keep your <b>hands clean</b> and wear cotton gloves.</li><li>▪ <b>Never use ink</b> on archival materials</li><li>▪ Substitute copies - either photocopies or microfilm, for worn, damaged, or sensitive originals.</li><li>▪ Make sure researchers <b>do not mishandle</b> materials - Bending, folding, tracing, or writing on them</li><li>▪ Examine archival materials <b>after use</b></li><li>▪ <b>Store materials securely</b> in folders and boxes</li></ul>
<ul style="list-style-type: none"><li>▪ Inappropriate conservation treatment</li></ul>	<ul style="list-style-type: none"><li>▪ Never use any kind of <b>adhesive tape</b></li><li>▪ Do not <b>add to or write</b> on archival material</li><li>▪ Do not <b>laminate</b> documents</li></ul>

## Methods of control (Natural)

Causes	Method of control
<ul style="list-style-type: none"><li>▪ Fires, floods, storms, earthquakes, etc</li></ul>	<ul style="list-style-type: none"><li>▪ Disaster plan/preparedness<ul style="list-style-type: none"><li>- Before disaster</li><li>- During disaster</li><li>- After disaster</li></ul></li><li>▪ Implement vital records program</li></ul>







Thank You