

# Preserving Books In Libraries 04 JUN 1985

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**L**IBRARIANS and book lovers in tropical and sub-tropical countries, specially in Bangladesh must take special care to protect their materials from both the destructive forces of nature and the cruel teeth of time with a view to keeping them in good physical condition and ensuring their maximum longevity.

Problems of proper care and preservation of library materials have mainly two aspects: (1) protective and preventive measures with a view to reducing their decay and deterioration; and (2) curative and preservative methods to be adopted for repair of old, damaged and pest affected materials.

The following conditions are injurious to proper preservation of library materials.

**Light:** Excess of light and heat is injurious to the contents of the library specially in a tropical country like ours. Similarly injury is also caused by diffused daylight. As a protective measure the library building should be kept as cool as possible and the materials should be little exposed to direct sunlight. Only under special circumstances when the pages of the books and other reading materials are stacked on one another they are aired and sunned but never exposed directly to the sun. The doors and windows of the Library should be covered with either yellow or green curtains or venetian blinds. It is desirable to use incandescent light inside libraries so that these can be put off when not required.

**Moisture:** It contains carbon dioxide derived from the air and sulphur acids from burning coal or coalgas. Moist air is injurious to due preservation and as such it should be removed. It can be done by proper ventilation and free circulation of air.

**Atmospheric condition:** Too high and too low humidity as well as rapid fluctuations in temperature are inconvenient for proper preservation. In high temperature materials may be cracked and in low temperature they may be squeezed. Fluctuations in temperature cause decay and render paper brittle. It is there

fore necessary to maintain an equitable temperature. The effects of these factors can largely be eliminated through air conditioning. Libraries which cannot afford airconditioning may control humidity either by installing de-humidification units or by home-made de-humidifiers, using calcium chloride.

**Dust and dirt:** Dust and dirt directly affect library materials. So care should be taken to keep out dust. Regular cleaning of the contents of the Library is essential. It is desirable to clean with the help of a vacuum cleaner rather than by manual dusting as there is a possibility of damaging the materials. The librarians may tell the cleaners exactly how dusting should be done. Books and other reading materials should be taken out from the shelves at the time of cleaning. It is desirable that libraries should possess tight-fitting doors and windows and if possible the entrance door should be completely shuttered or masked.

To safeguard against the danger of fire no combustible materials should be used in libraries. As an additional precaution every library should be equipped with fire extinguishers to meet an emergency.

To protect materials from damp, the foundation of library building should be solid and well-laid; the floor level should be above the surrounding ground level. Proper storage conditions greatly help in the preservation of materials. Racks should not be built in the wall as it will become impossible to protect materials from damp and pests.

**Insects:** Library materials are subject to attack by insects. And in most cases these are partly or totally destroyed by insects. The situation may be tackled by adopting following measures: 1) Regular inspection and cleaning is necessary to keep the materials in good condition. Insects may be prevented by keeping naphthalene balls or camphor cakes, or orrisroot or raw lime cakes, cloves, black-pepper cinnamon, in equal proportions. If shelving consists of brick or naphthalene place in

each alternate bay is sufficient. Camphor balls in desk drawers, cupboards and filing cabinets protect loose papers and files from silver-fish. Spraying with flit and D.D.T. powder in the library building will help check the growth of pests in and around the stacks. Care should be taken at the time of spraying that the materials are not stained by the fluids. 2) A measure called fumigation may be applied to kill the insects. Fumigation should be done either with formaldehyde or thymol. If the collection is badly infested by insects advice from an expert may be sought.

The following are the main enemies of Library materials:

1. **Termites:** Termites are of two kinds, (a) earth-dwelling termites and (b) wood-dwelling termites. Both the types can do a serious damage to a library in a single night. It is desirable to avoid placement of wooden cupboards against walls as they have a habit of eating their way into the back of such cupboards. Kerosene oil birch oil on leather or rexine binding are good preventives. Use of D.D.T. powder has proved to be useful in driving out these pests from library.

2. **Cockroaches:** The food of cockroaches includes stick cloth or backram and other pastes and glues used in binding. They generally enter libraries via drains and toilets. Male ones can fly. In addition to gnawing books, they emit a dark ink like liquid which defaces the pages of books. Borax may be safely used to keep them away from the library.

3. **Silverfish:** They are most active and may do considerable harm to a library. Use of copal varnish on the cover of books may give satisfactory result.

4. **Firebrats:** In appearance they are almost like silverfish. They are also harmful to materials although not as much as silverfish.

5. **Booklice:** They are very fond of paste (or glue and other things) applied in binding. They damage books by eating out particularly the binding.

6. **Book worms:** Book worms are of various kinds. They are

actually the larva of a beetle. They make tunnels through the covers and pages of books. Once such a book is detected it should be separated from others. Benzene should be applied on it. To get rid of these pests constant vigilance is necessary.

7. **Rats and Mice:** rats and mice are also great enemies of books. Caustic soda may drive away rats from the library and mice avoid trodding the place where camphor is scattered.

8. **Brown House Moths:** They gnaw through both cloth and leather bindings but do not touch the book bound with Morocco leather. Regular checking of stacks and racks is necessary.

9. **Mud Wasps:** They make their nests at the rear edges of books as they stand on shelves corners of book cases etc. Although they are not so harmful but their existence is not at all desirable in the library.

10. **Mildew:** It is generally formed on the leather binding of the books in damp climates. Lubricating oils such as birch oil, castor oil, vaseline etc. are very effective in the prevention of mildew.

The following preventive and curative measures may also be taken into consideration for a library. Phenyl or crude creosote diluted in kerosene oil can be sprinkled on the shelves; it must be ensured that the books are not stained by the fluids. Dry Neem and tobacco leaves can be placed in the folds of the book. Books may also be treated with insecticides. Spreading mixture of chopped tobacco and black pepper in equal proportion on book shelves is also effective.

In this connection also prevention is better than remedy. Frequent cleaning and proper inspection will help library materials to be kept in good physical condition.

Old and brittle papers can be reinforced with tissue paper or chiffon. The common method of repairing books is with paste and paper; paste may be prepared with flour but it is necessary to add therein a small quantity of Neela Thotta.