

DISASTER SALVAGE TEAM Working Towards Saving Cultural Collections

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Notes from the Care and Conservation of

Photographs Workshop

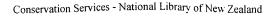
Taken by Mark Strange, Photograph Conservator from the National Library, Wellington.

Organised in conjunction with Te Papa National Services.

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Fact Sheet

Conservation Services

Care of Photographs

Photographs can have a long life. Their life-expectancy depends on three things: the type of photographic process (black and white, colour, slide or print), how well they were processed and the way in which the photographs are stored and handled. This pamphlet outlines some of the differences between the most common processes and provides guidelines for preserving your photographs.

Photographic Processes

Photographic prints, negatives and slides are the most common types of photographic material. These are all multi-layered objects, made up of a gelatin emulsion layer on a paper or film base. The gelatin emulsion contains the image material (silver or coloured dyes). These layers each respond differently to the surrounding environment.

Black and white silver images are more stable than colour images. Colour photographs and negatives are made up of coloured dyes which have a poorer resistance to damage from light, moisture, heat and chemical contamination than silver image photographic materials. Record important events using black and white film if you wish to pass them on to your descendants.

Care and Handling

Never touch the surface of a print or film with your fingers, as skin oils and salts will cause permanent damage. Wear clean cotton gloves while handling photographs, or wash your hands and handle by the edges only.

Treat your negatives with care. If a print is lost or damaged, the negative will enable another copy to be made. It is important to label your negatives. Basic information, such as the date, subject and location, written on the negative sleeve will save a great deal of time when you are searching for a particular image at a future date. For large collections, a numbering sequence can be very helpful. Labelling also reduces the chance of damaging fragile film by unnecessary handling.

Avoid writing on the back of prints with pen or marker. Avoid using pressure-sensitive labels or tape. If it is necessary to write on the back of a print, use a soft 2B pencil in the border area.

Storage

Unfortunately, many commercially available photo albums are unsuitable for long-term preservation. These products may include unstable and harmful materials such as PVC (polyvinylchloride) plastic, rubber cement and glassine paper. These should be avoided. Do not use "magnetic" photograph



albums. These have clear plastic overlay sheets which hold photographs in place by clinging to the album pages. After a few years, the pages tend to discolour and become very sticky. Album pages should be made from good quality, acid-free paper and prints should be attached to the pages using photo corners. Never glue or tape a photograph into place. It is also a good idea to interleave the pages of a photo album with acid-free paper or tissue. If plastic pages or sleeves are used, be sure they are of "archival" quality. This means that they are made of polyethylene, polyester or polypropylene, which are all inert plastics. If photographic storage enclosures are archival, they will be advertised or labelled as such.

Loose photographs should be stored flat if possible, in acid-free folders, envelopes or inert plastic sleeves. Remove all metal fasteners such as staples, paper clips and pins as they may cause staining or corrosion of the image silver. Put your prints into acid-free cardboard boxes. Archival boxes and enclosures are available from conservation materials suppliers.

Photographs are particularly susceptible to damage from gaseous pollutants such as exhaust fumes, household cleaning products, paint fumes and ozone from photocopiers. Collections should be stored away from such sources of contamination.

Ideally, photographs should be stored in a clean, cool, dry place. Recommendations for long-term storage suggest a temperature of 20° Celsius and a relative humidity of 50 percent or less. Locations with unstable or extreme environmental conditions, such as attics, sheds, garages, cellars or laundryrooms, should be avoided. Keep collections well off the floor.

Photographic gelatin is a very attractive substance for mould. High humidity or moisture can initiate mould activity. Mould-damaged photographs should be allowed to dry thoroughly in an area with good air circulation. If mould is visible it should be brushed away with a soft brush after the material has been dried. This should be done outdoors to prevent the re-deposition of the mould spores. Dust and dirt attract moisture which can also lead to the development of mould. Loose dust and dirt can be removed by gently brushing with a clean soft brush.

Display

The guidelines for the display of photographs are similar to those for the display of artwork on paper.

Colour photographs are particularly susceptible to fading and should be protected from excess light. Avoid display near windows or in direct sunlight.

Framing provides protection from dust, dirt and gases which can damage the image. Framing also protects against climate fluctuations. Be sure to use good quality materials and appropriate methods for the matting and framing of valued photographs.

For more information, see the other fact sheets in this series: Preserving Family Collections, Care of Books, Care of Archival Materials, Care of Artworks on Paper, Care of Sound Recordings

<u>CHRONOLOGY OF PHOTOGRAPHIC</u> <u>TECHNIQUES</u>

	1800	1850	1900	1950	Present
I. Bleck-and-White					
Daguerreotypes					
Early Photographs on Paper					
Calotypes					
Salted Paper Prints					
Materials Using a Collodion Binder					
Ambrotypes					
Tintypes					
Collodion Wet Plate Negative					
Collodion Dry Plate Negative					
Collodion Prints					
<u>Materials Using an Albumen Binder</u>					
Albumen Negative					
Albumen Positive					
Materials Using a Gelatin Emulsion					
Gelatin Dry Plate Negative					
Roll Film					
Sheet Film					
Cellulose Nitrate Film					
Cellulose Di-Acetate Film					
Cellulose Tri-Acetate Film					
Polyethylene Terephthalate					
Developing-Out Papers					
Printing-Out Papers					
Resin Coated Papers					
Instant B/W Photographs					
II, Monochrome Non-Silver Materials					
Cyanotypes Gum Dichromate Prints					5562
Carbon Prints					
Woodburytypes					
Collotypes					
Platinotypes					
III. Additive Color Processes					
Screen Plate Color					
IV. Subtractive Color Process					
Chromogenic Development					
Kodachrome Transparency					
Ektachrome Transparency					
Color Negative Materials					
Color Print Materials					
Silver Dye Bleach					
Silver Dye Bleach (Cibachrome)					
Dye Imbibition					
Dye Transfer					
Dye Diffusion Transfer					
Polacolor					
SX-70					
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Key: Period of greater use Period of lesser use