

Workshop: How to Restore Documents Damaged by Water

1. Absorb Water and Dry

〈Mainly applicable to〉

Documents with minor water damage

〈Procedure〉

(1) Keep a Record and Take Photographs

- Keep a record of information about the damaged documents, and take their photographs.

(2) Absorb Water and Dry

- 1) Put a piece of paper towel between the pages of a document.
- 2) In the same manner, put a piece of paper towel between all the pages that can be opened.
 - You do not have to force open all the pages.
- 3) Press the entire document gently to absorb water with the paper towels.
- 4) Replace the paper towels with new ones.
- 5) Repeat the same process.
 - If you are to treat more than one document at the same time, put paper towels in all the documents first and then come back to the first document to replace the paper towels.

(3) Arrange and Store

2. Clean and Dry 【*】

〈Mainly applicable to〉

- Water-damaged documents severely covered with dirt
- Especially the documents damaged by seawater

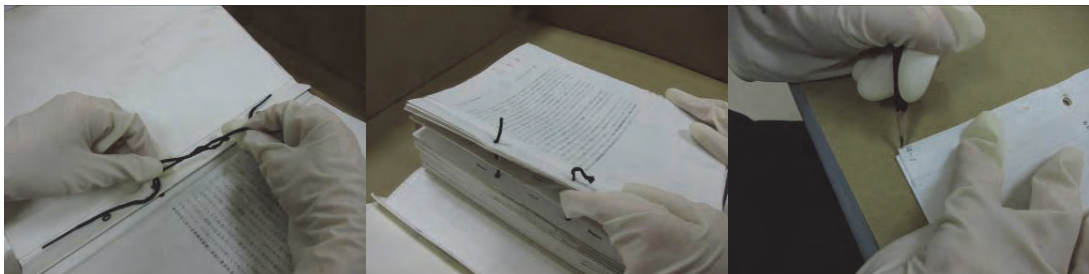
〈Procedure〉

(1) Keep a Record and Take Photographs

- Keep a record of information about the damaged documents, and take their photographs.

(2) Dismantle and Number

- 1) If the document has cover sheets, take out the body text from the cover sheets.
- 2) Put numbers on each page of the body text.



(3) Dry-clean

Remove the dirt, sand, dust, and mold, etc. adhered to the surface of the document using brushes, microfiber cleaning cloths, and spatulas, etc.



(4) Disinfect by Ethanol

Spray ethanol for disinfection on each page of the documents to dissolve molds.



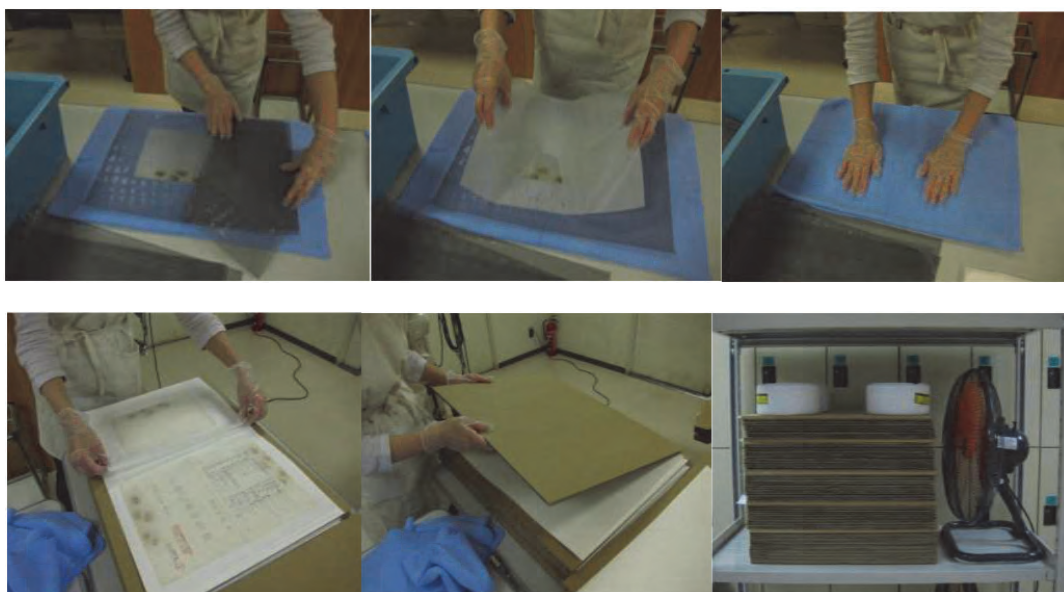
(5) Wash

- 1) Prepare a vat filled with water and a plastic foam board.
- 2) Sandwich a page of the document between two mesh screens.
- 3) Place the document sandwiched between the mesh screens on the plastic foam board. Submerge the screens in water, and remove the dirt etc. using brushes.



(6) Dry and Flatten

- 1) Remove the document from the mesh screens. Sandwich the document between non-woven cloth sheets. Use water absorption cloth to absorb water.
- 2) Sandwich the document covered by non-woven cloth sheets between two corrugated paperboards or paper filters.
- 3) Pile up the corrugated paperboards or paper filters. Apply wind from the side using an electric fan to air-dry.



(7) Arrange, Rebind and Store

- 1) Remove the pages of the document that are now dry and flat. Put them into numerical order.
 - 2) If the document can be bound easily as a volume or in a file, bind the pages again. As for the documents in other forms, compile the pages and tie in a bundle with a string, or put them in an envelope for storage.
- 【*】 This cleaning and drying technique was devised by “Tokyo Document Recovery Assistance Force,” a volunteer group that was set up in order to save the documents damaged by the tsunami generated by the Great East Japan Earthquake. This technique is designed to enable non-conservators to work safely. For details, please visit the following website of “Tokyo Document Recovery Assistance Force” (<http://toubunq.blogspot.jp>, accessed on March 19, 2016).