



A Condition Assessment Rating System for Textiles

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One of the most important factors in treatment, storage, and exhibition decisions for a textile conservator is the condition of the object. In an effort to reduce some of the inherent subjectivity in condition assessment terminology, the author describes a five-level macroscopic condition assessment guide that corresponds to a parallel series of storage and exhibition treatment options. In large part, macroscopic indications of deterioration are reflections of damage within the fibers themselves. The macroscopic condition assessment rating system presented here may serve as a model for a similar approach to developing a standard vocabulary for the description of microscopic fiber deterioration.

One of the most important factors in artifact care decision-making for a textile conservator is the condition of the object. This is usually established through visual examination and further examination under low (up to 70X) magnification. In large part, microscopic indications of deterioration are reflections of damage within the fibers themselves.

Condition descriptions are by their very nature extremely subjective. For example, a colleague who regularly works with highly deteriorated archaeological material might assess a 12th-century textile that I consider to be in fair-to-poor condition as being in very good condition. Our frames of references are based on our own experience and may be very different. This rating system was developed in order to try to standardize the assessment of the macroscopic

condition of textiles and to remove some level of the subjectivity.

The condition assessment rating system is divided into five different levels: Good, Good-Fair, Fair, Fair-Poor, and Poor with 10 assessment factors (figure 1, see next page). Good condition is defined by an absence of all of the assessment conditions (no loss of flexibility, no areas of loss or fraying, no dimensional distortions, no surface dirt or stains, no discoloration, no fading, no color bleeding, no mildew, no previous repairs, and no insect infestation). Any change from this "perfect" condition moves the assessment into another level. An additional way of understanding the condition assessment is graphically, where the progressive darkening on the chart translates into worsening conditions (figure 2). This type of condition assessment guides and corresponds to a parallel series of storage and exhibition treatment options that have been developed over the years at the Cooper-Hewitt Museum in response to this institution's collections, resources, and needs.

CONDITION	1	2	3	4	5
FLEXIBILITY					
LOSSES					
DISTORTIONS					
DIRT					
DISCOLORATION					
FADING					
BLEEDING					
MILDEW					
REPAIRS					
INSECT INFESTATION					

Figure 2. Graphic representation of Condition Assessment Rating System for Textiles

#1 GOOD CONDITION**#2 GOOD-FAIR CONDITION****#3 FAIR CONDITION**

NO LOSS OF FLEXIBILITY
 NO AREAS OF LOSS/FRAYING
 NO DIMENSIONAL DISTORTIONS
 NO SURFACE DIRT/STAINS
 NO DISCOLORATION (YELLOWING/BROWNING)
 NO FADING
 NO COLOR BLEEDING
 NO MILDEW
 NO PREVIOUS REPAIRS
 NO INSECT INFESTATION

NO LOSS OF FLEXIBILITY
 SMALL AREAS OF LOSS/FRAYING
 NO DIMENSIONAL DISTORTIONS
 SLIGHT SURFACE DIRTY/STAINS
 SLIGHT YELLOWING
 SLIGHT FADING
 NO COLOR BLEEDING
 NO MILDEW
 NO PREVIOUS REPAIRS
 NO INSECT INFESTATION

NO LOSS OF FLEXIBILITY
 MODERATE AREAS OF LOSS/FRAYING
 NO MAJOR DIMENSIONAL DISTORTIONS
 MODERATE SURFACE STAINING/DIRT
 MODERATE YELLOWING/BROWNING
 MODERATE FADING
 NO COLOR BLEEDING
 NO MILDEW
 WELL-EXECUTED PREVIOUS REPAIRS
 NO INSECT INFESTATION

Figure 1. Condition Assessment Rating System for Textiles

Level 1, Good Condition:

Storage: Most textiles in good condition can be rolled for storage on archival tubes with a protective over-wrapping (Mylar) and stored in single layers in two stacking trays within an archival box (figure. 3).

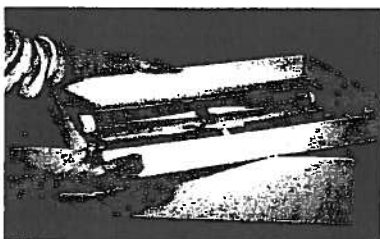


Figure 3. A tray of rolled textiles being removed from an archival storage box.

Exhibition: A textile in good condition is usually stable enough to be free hung. In an exhibition of contemporary textiles at the Cooper-Hewitt, physical barriers to the public were the only real protection that was required (figure 4). The pieces are strong enough to bear their own hanging weight. They can be safely manipulated and vacuumed after the exhibition.

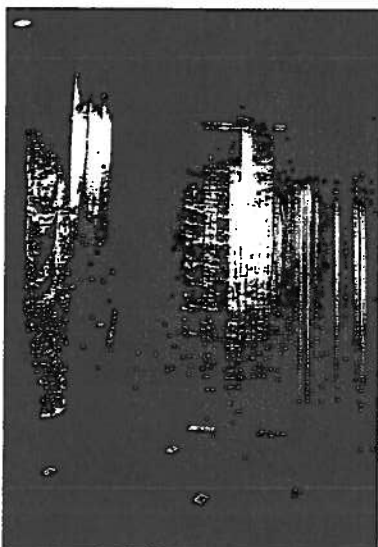


Figure 4. *Color, Surface, Light*, installation of contemporary textiles at the Cooper-Hewitt in 1990.

Level 2, Good-Fair Condition:

Storage: Textiles in this category are in good-fair condition, where there maybe some fraying, minor holes or slight staining, but they are still flexible can be interleaved between tissue in an archival box for storage (figure 5). These textiles can be handled on the tissue support without physically touching the piece, which is a significant change from the physical manipulation necessitated during rolling a textile in Level 1 storage.

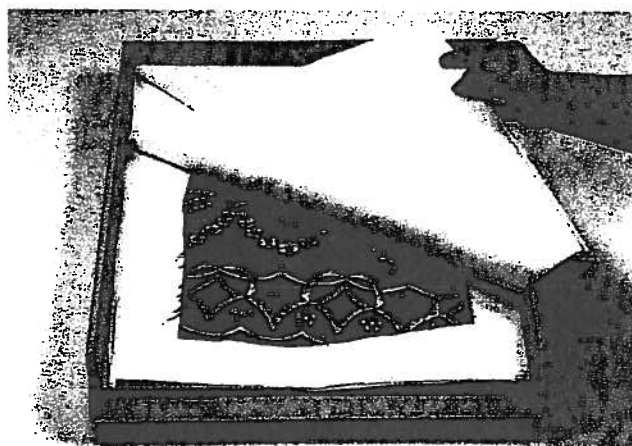


Figure 5. Embroidered textile samples interleaved between neutral pH tissue in an archival storage box.

#4 FAIR-POOR CONDITION

MODERATE STIFFENING OR INFLEXIBILITY
 AREAS OF LOSS/FRAYING/ ABRASION
 OBVIOUS DISTORTIONS
 OBVIOUS MARRING STAIN/DIRT
 MARRING YELLOWING/ BROWNING
 LARGE AREAS OF FADING
 COLOR BLEEDING
 PRESENCE OF ACTIVE MILDEW/ MUSTY ODOR
 LARGE NUMBER OF PREVIOUS REPAIRS
 SIGNS OF INSECT INFESTATION

#5 POOR CONDITION

VERY FRAGILE
 FIBER LOSS WITH ANY MOVEMENT TO TEXTILE
 MAJOR DISTORTIONS
 VERY DIRTY/ STAINED
 VERY YELLOWED/ BROWNED
 VERY FADED
 MAJOR AREAS OF COLOR BLEEDING
 PRESENCE OF ACTIVE MILDEW/ MUSTY ODOR
 LARGE AREAS OF POORLY-EXECUTED PREVIOUS REPAIRS
 ACTIVE INSECT INFESTATION

Exhibition: A temporary pressure mount provides physical support for what would otherwise be the vertical hanging weight of the textile and a physical barrier to handling and the exterior environment (figure 6). In a temporary pressure mount the pressure is provided by a sheet of acrylic plastic that is secured directly over the textile. The temporary pressure mounts are removed after the exhibition and the textiles are returned to storage.

For pieces that cannot safely be mounted in a temporary pressure mount another exhibition option for Level 2 condition is on a fabric-covered support board in a vitrine. For example, due to

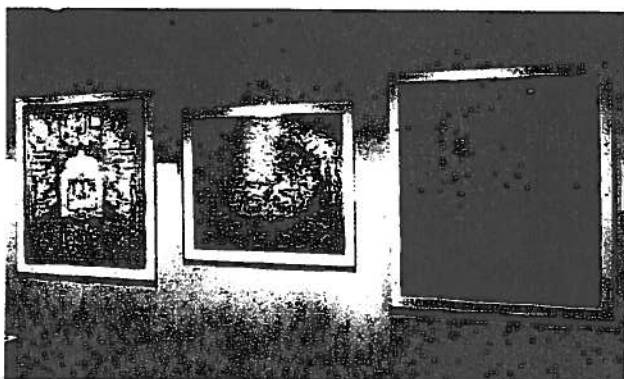


Figure 6. An exhibition of 18th century damask napkins in temporary press mounts at the Cooper-Hewitt in 1984.

their surface relief, embroidered samplers are not appropriate for pressure mounting, but can be shown on flat or slightly angled support boards within vitrines (figure 7). Exhibited in this way, the textiles do not have to support their vertical weight and are protected from the external environment. After exhibition, the textiles are removed from their press mounts or support boards and returned to storage. Level 2 textiles need to be strong enough for this amount of physical handling.

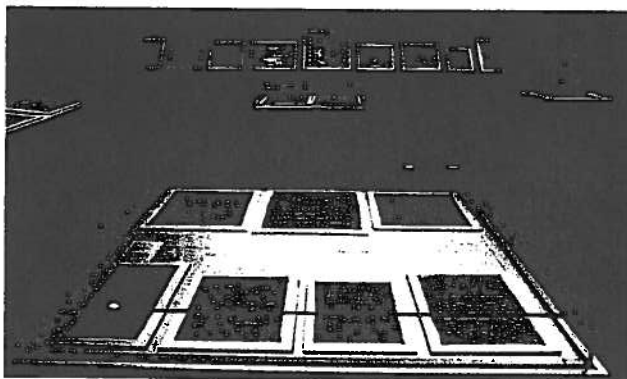


Figure 7. An exhibition of samples in exhibition vitrines at the Cooper-Hewitt in 1985.

Level 3, Fair Condition:

Storage: For textiles in fair condition, the storage mat functions as the exhibition mount. This eliminates the physical stress of moving the textile from storage to exhibition and back again. For example, these 6th-century Coptic fragments are stored in an exhibition/storage mat with a protective layer of translucent tissue over the pieces (figure 8). The mat is stored in a Mylar/Reemay sleeve and stacked in an archival box with other similar pieces.

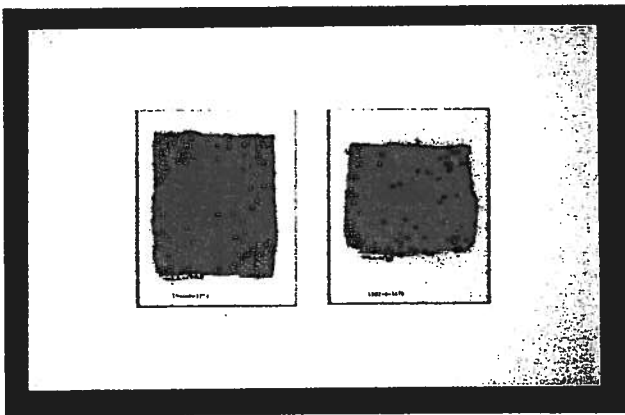


Figure 8. Two 6th century Coptic fragments in storage/exhibition mats with a protective layer of translucent tissue covering the pieces.

Exhibition: The translucent tissue is removed and the mat can be placed flat in an exhibition vitrine (figure 9). In this type of storage/exhibition mat, the surface traction of the desized, unbleached muslin on which the pieces are resting keeps the textiles in place. There is no additional physical attachment or pressure on the piece.

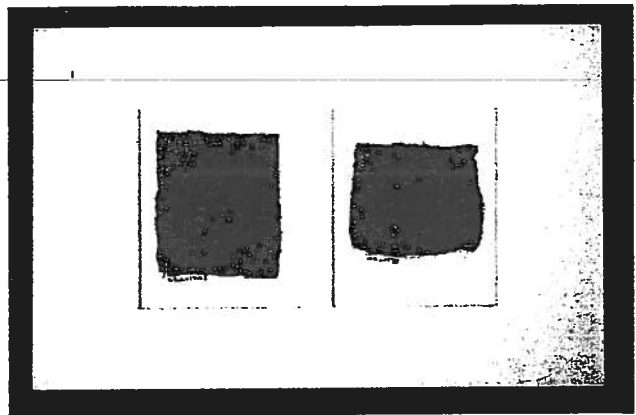


Figure 9. The Coptic fragments with the translucent tissue removed in an exhibition-ready mount.

Level 4, Fair-Poor Condition:

Storage and exhibition: An example of a Level 4, fair-poor condition textile is a 14th-15th century Hispano-Moresque fragment that is too fragile to be handled from storage to exhibition. A Level 4 condition textile requires protection from physical contact and from air movement. One treatment approach is a Mylar-lined window in the mat (figure 10, note the glint of the Mylar in this photograph). A textile can be exhibited flat in this mat within a vitrine. Note that the accession number in lower right corner is in a removable sleeve for exhibition purposes.

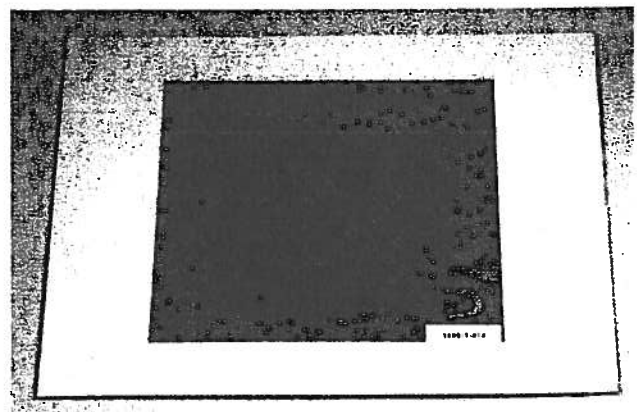


Figure 10. A 14th-15th century Hispano-Moresque fragment in an encapsulated Mylar storage/exhibition mount

Deconstruction of the mat: When the hinged window mat with Mylar is opened, the encapsulated inner structure of the mount is visible and the stitching that holds together the Mylar encapsulation and the inner mat (figure 11). Because this textile is encapsulated, fiber identification must be accomplished and samples should be taken before mounting. The reverse is accessible by flipping over the mat where a Mylar window has been created in the mounting fabric (figure 12). This mount allows the storage, study, and exhibition of textiles in fair-poor condition with full support and protection from any physical handling.

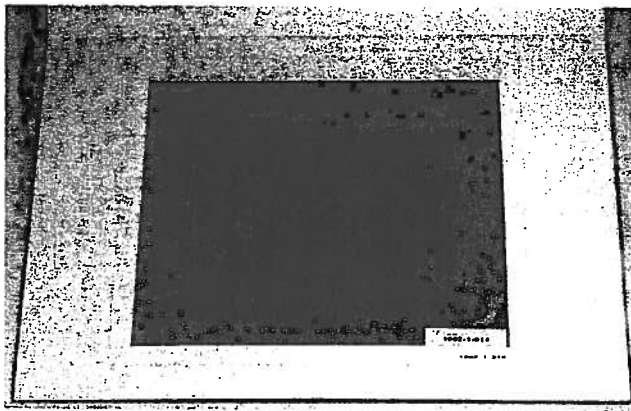


Figure 11. The Hispano-Moresque fragment mount opened to reveal the inner encapsulation held in place with stitching outside the edges of the piece.

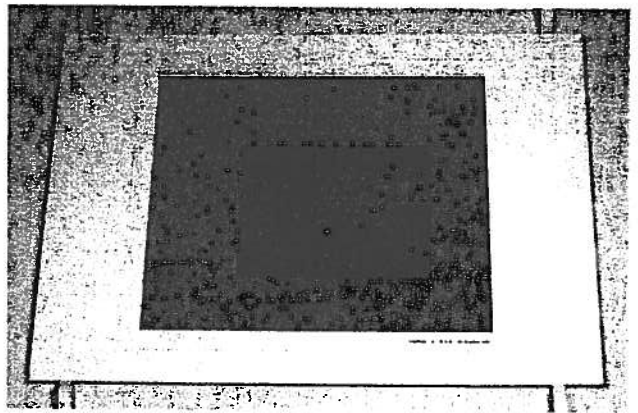


Figure 12. The reverse of the encapsulated Hispano-Moresque fragment mount showing a viewing window protected with a layer of Mylar.

Level 5, Poor Condition:

Storage and exhibition: For textiles in poor condition, an even more rigid and protective exhibition/storage mount is required due to the extremely fragile condition of the piece.

An example is a 12th-century Hispano-Moresque fragment mounted in a permanent pressure mount framed within a acrylic box and with a thick, rigid support on the back (figure 13). For such a permanently “encased” piece, it is critical to maintain access to the back of the piece and to complete fiber identification and sampling before mounting. This mount was developed with Denyse Montegut during her internship at the Cooper-Hewitt. A series of doors have been cut through the laminated support board, padding, and exhibition fabric to reveal the back of the textile through a protective layer of Mylar (figure 14).

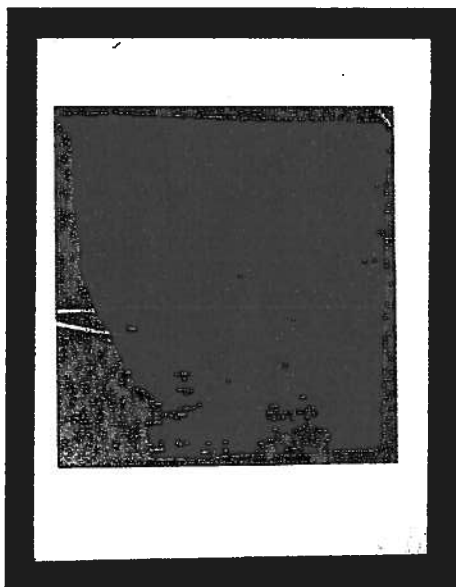


Figure 13. A 12th-century Hispano-Moresque fragment mounted in a permanent pressure mount that has been framed in an acrylic box frame.

Conclusion

There is a close connection between the condition of a textile and critical treatment decisions for both storage and exhibition. The use of a standardized assessment system for the macroscopic condition of textiles may be relevant to the development of a similar standardized system and terminology for the assessment of fibers under the microscope. The assessment of microscopic fiber condition may be an additional analytical tool that can inform treatment decisions.

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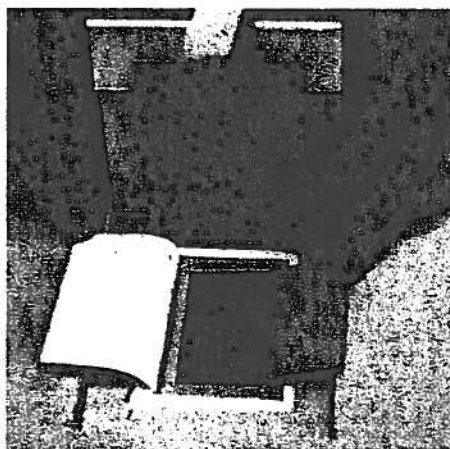
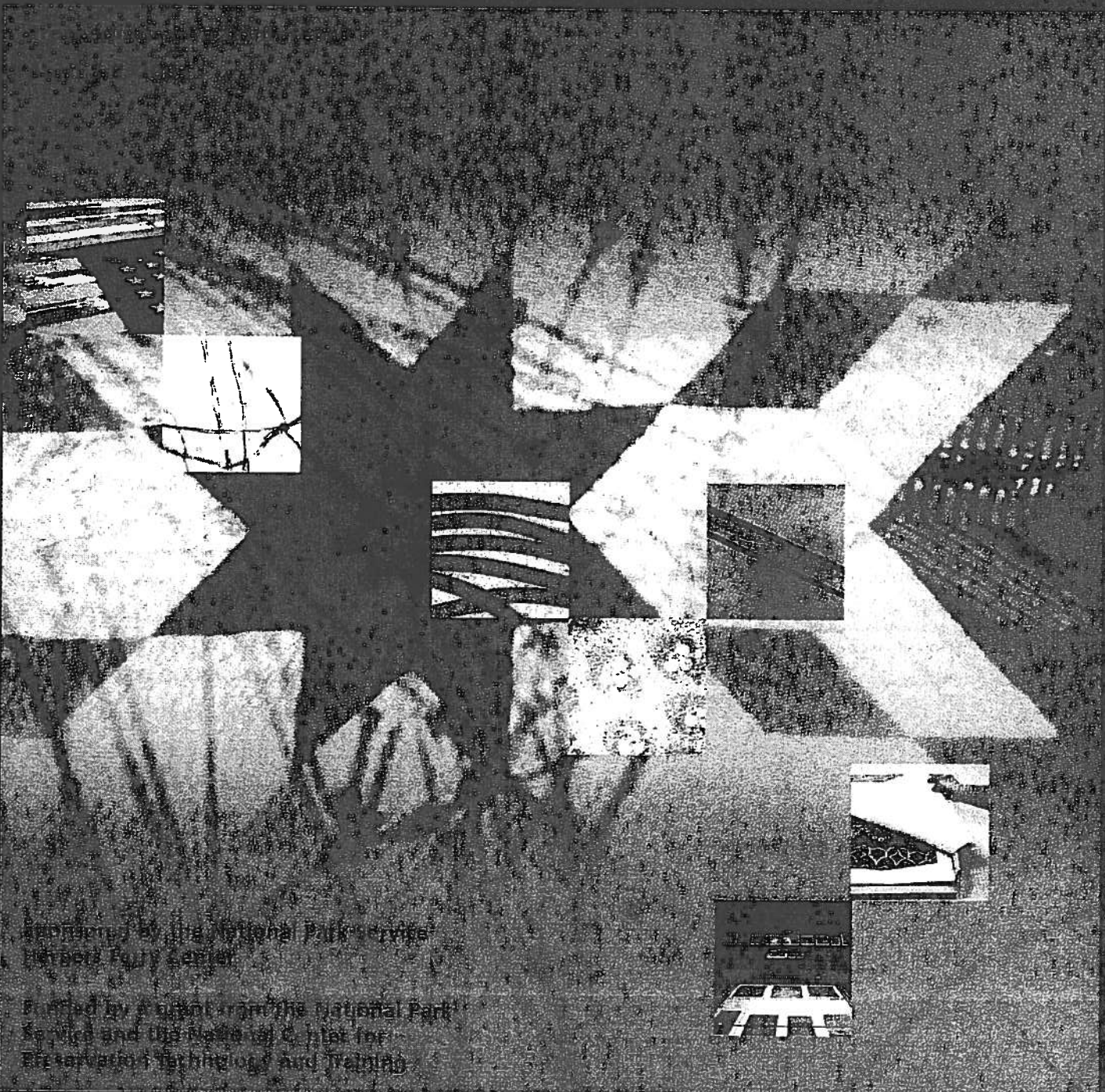


Figure 14. Viewing window on the reverse of the framed permanent pressure mount.



Development of a Web-Accessible Reference Library of Deteriorated Fibers Using Digital Imaging and Image Analysis



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