



## Housing Papyrus at the University of Michigan Library

BY MARIEKA KAYE

It's a given that a large university serving over 42,000 students is a vast realm made up of a multitude of microcosms, many of which are hidden from general view. The University of Michigan in Ann Arbor is no exception. While the U-M Library holds a wealth of unique special collections items, many patrons are not aware of one particularly tiny and independent department hidden away on the top floor of the Hatcher Graduate Library, the Papyrology Collection. This collection is full of treasures swept away from sandy Egyptian archaeological excavation sites. These excavations occurred from the 1920s – 1940s, inspired by Francis Willey Kelsey, a professor of Latin who spent 1889 – 1927 at U-M. He strongly believed that students in the classics learned best from direct contact with ancient materials. Because of his extensive travels, purchases and organization of excavations, the University of Michigan Library is now home to the largest collection of ancient papyri in North America and the fifth largest world-wide, spanning approximately 2,000 years, from 1,000 BCE to 1,000 CE. These collections contain priceless gems such as 30 leaves of the oldest known copy of the Epistles of Paul, as well as more humble but fascinating personal letters, school primers, sales contracts and items illustrating everyday life.

As a child growing up in the Metro Detroit area, I spent hours exploring the Egyptian collections at the Detroit Institute of Art but I never imagined

the close encounter I would one day have with this ancient world. When I joined the conservation team at the U-M Library in the summer of 2013, I hoped to be able to dive in under Senior Conservator Leyla Lau-Lamb's expert instruction. Upon my first day training with Leyla in the Papyrology Collection, I was handed a beat up old tin box full of what looked like ancient cornflakes (*illustrations 1a & 1b*). This was to be my first assignment, as daunting as it looked. When it comes to papyrus, everything is sacred; you cannot take a single fragment containing ink for granted.

In the Papyrology Collection there are many examples of what are now affectionately termed "cornflake" or "no-sneeze" boxes, which were the result of various excavations. I was assigned many of them, including a beautiful old soapbox full of further treasures to literally unfold (*illustrations 2a & 2b*). With a papyrologist's help, fragments with ink were separated out from the masses and my work began (*illustration 3*). I approach each fragment individually since each may have been made in a different time period, with a different variety of plant, varying ink recipes and differing skill levels in sheet manufacture.

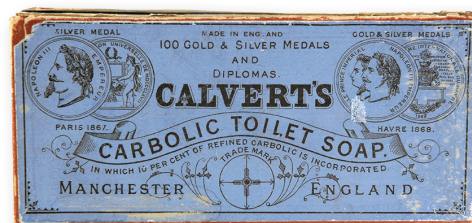
Most training in the conservation of art and historic artifacts makes mere mention of papyrus as a material one might encounter and it is seldom that a conservator has the opportunity to work on papyrus directly. Papyrus is its own unique material, not at all like the paper, leather or parchment generally encountered by the typical book



1a: "Cornflake" box



1b: Fragments held within a "cornflake" box



2a: Soapbox holding papyri fragments



2b: Fragments held within the soapbox

and paper conservator. Papyrologists and conservators over the decades have carefully felt their way through the challenges of handling papyrus and making it available to students and scholars to study and publish.

There has been valuable contributions to the literature over the years by pioneers in this area, such as colleagues at the Brooklyn Museum, Princeton University, the Egyptian Museum of Berlin and the British Museum, as well as the American Papyrological Information System (APIS), which includes detailed Conservation Guidelines provided by Leyla, who has been diligently treating the papyrus collections at U-M and teaching students around the world for over 20 years. While methods and materials may vary amongst institutions, the consensus emphasizes the importance of protecting papyri fragments from any direct handling during use. Beyond the repair and treatment of the fragments themselves, proper housing is of the utmost importance and focus.

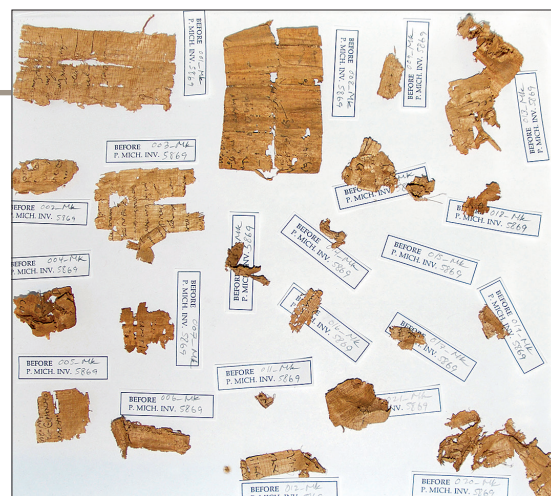
When thinking about the housing of papyrus for safe handling, a familiar choice has traditionally been glass (illustration 4). Those responsible for collections that are smaller in scale will often place all of the papyrus fragments between panes of glass as a protective housing, a practice that has been supported for decades. A common practice is to secure the fragment to the glass using tiny and discreetly placed strips of glassine or Japanese paper, coated with a water-soluble adhesive such as dextrin or wheat starch paste (illustration 5).

While polyester encapsulation, Stabiltex slings and sheets of acrylic have been put into use in more recent years, glass has proven to be the most stable over the decades. It provides a smooth rigid support that does not bend or abrade the vulnerable and often frayed structure of the papyrus.

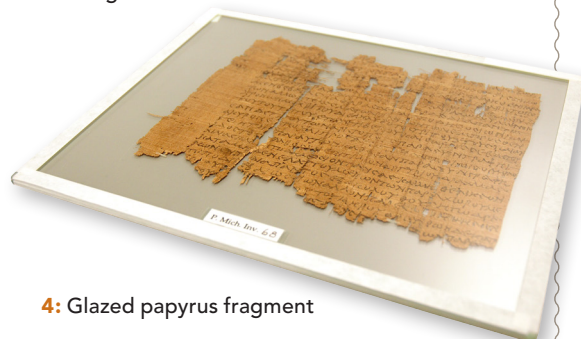
As emphasized by the papyrus conservator Bridget Leach at the British Museum, glass is heavy and fragile which encourages careful handling. When using glass, we avoid the risks associated with the static charge found in the polyester and acrylic substrates. Even the smallest amount of static can damage the papyri and the media it carries. As compared to acrylic glazing, glass is also virtually scratch proof, allowing for a clear view of the papyri for study.

Of course the housing needs of a particular collection ultimately depend on available space as well as the size and use of the collection. When approaching housing concerns for fragments coming out of the “cornflake” boxes, one cannot realistically glaze each fragment between panes of glass. The weight and cost of glazing a collection of 18,000+ individual fragments is unrealistic, so through the years conservators at U-M adapted a folder system to safely house the majority of the collection. When pieces are exhibited, go out on loan, are used in extensive studies or are in higher demand, they can be glazed as needed. Due to the size of the collection, only about one-fifth of the fragments have been published. There is still a large portion of the collection that is not regularly used and is in stable condition so folders suffice.

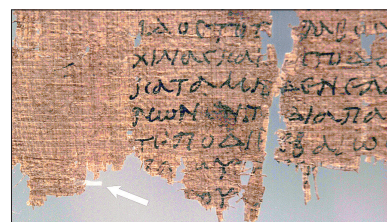
At U-M there are two standard sizes of folders that are then placed into standard size boxes, both cloth-covered clamshells and gray/white drop-front storage boxes made of buffered board (illustrations 6a & 6b). The folders are made of 20-point lignin-free buffered folder stock and are lined on one side with buffered blotting paper adhered with a mix of methylcellulose and an EVA-based adhesive which is rolled out in an even coat with a small roller (illustration 7). The surface of the blotting paper provides gentle friction to prevent the



3: Fragments containing ink that were separated out of a “cornflake” box for treatment and housing



4: Glazed papyrus fragment



5: Tiny strip of dextrin-coated glassine anchoring the fragment to the glass



6a: Cloth-covered clamshell boxes holding folders of papyri



6b: Gray/white drop-front storage boxes holding papyri

7: Folder with blotter adhered to one side







**8:** Vertical storage for glazed papyri



**9:** Small tissue carriers for large groups of fragments held in one folder

papyrus from sliding when the folder is handled. The folders are left to dry and off-gas thoroughly before they are put to use. The boxes and folders are kept horizontal at all times.

Boxes are housed in special shelving units designed to prevent over-stacking. These are kept in a locked vault with carefully controlled environmental conditions. For papyrus, the temperature is ideally maintained at 65 degrees F and 35% relative humidity. Most institutions do not have a dedicated vault for papyrus. At U-M we compromise by keeping relative humidity at 45% due to sharing a space with parchment. Most glazed items are stored vertically (**illustration 8**), which prevents stress from the weight of stacked glass. The conservators inspect any fragments requested by researchers to assess whether it is safer to glaze the fragment prior to use or if handling in the folder will suffice. Due to limited conservation hours in the Papyrology department, this has been an efficient way to handle such a tremendous collection.

Once I complete the treatment of the fragments from the “cornflake” boxes, I place the individual fragments in smaller lignin-free buffered tissue carriers which are then placed in the larger folders. This way the many fragments that belong to a single inventory number can stay together until they are identified and reassigned as appropriate (**illustration 9**). Some day a papyrologist may be able to place these tiny fragments into configura-

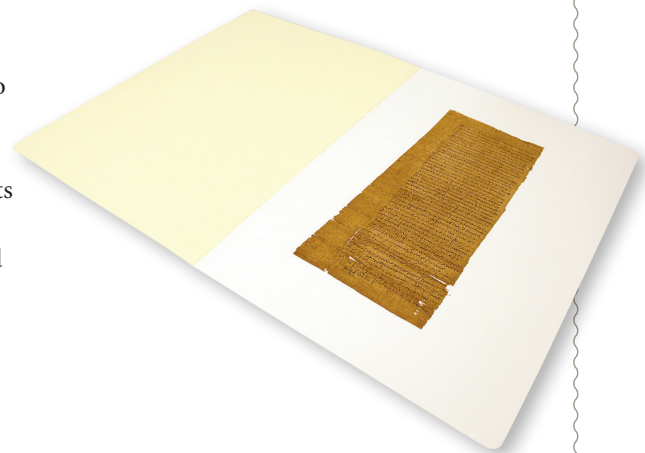
tions that make sense or translate the bits of text they can decipher. Larger fragments that are assigned one inventory number go straight into the folders on their own without any tissue carrier (**illustration 10**). For now the majority of the collection rests in boxes, ready to be handled safely when the time comes to be discovered once again. The folder system allows for the most efficient storage when working with such a vast collection of ancient treasures.

**Marieka Kaye is the Conservation Librarian / Book Conservator at the University of Michigan Library, Department of Preservation & Conservation. She can be reached at [marieka@umich.edu](mailto:marieka@umich.edu).**

#### Selected Bibliography

- Krutzsch, M. (2009). Conservation research in the Berlin papyrus collection. In P. Engel (Ed.), *Research in book & paper conservation in Europe: A state of the art* (pp. 43-50). Horn: Verlag Berger.
- Lau-Lamb, L. (2010 May). Advanced Papyrological Information System: Guidelines for Conservation of Papyrus. Retrieved from <http://www.lib.umich.edu/papyrus-collection/advanced-papyrological-information-system-guidelines-conservation-papyrus#sec-handling>.
- Leach, B. (1994). Papyrus conservation at the British Museum. In M. Capasso (Ed.), *Il Rotolo Libario: Fabbricazione, Restauro, Organizzazione Interna* (pp. 137-67). Lecce: Università degli Studi di Lecce, Dipartimento di Filologia Classica e Mediaevale, Centro di Studi Papirologici.
- Leach, B. (2005). Mounting papyri at the British Museum. In J. Raynor, J. M. Kosek, & B. Christensen (Eds.), *Art on paper: Mounting and housing* (pp. 193-198). London: Archetype Publications.
- Owen, A. & Danzing, R. (1993). The history and treatment of the papyrus collection at the Brooklyn Museum. *The Book and Paper Group Annual* 12, 36-40.
- Stanley, T. (1994). Papyrus storage at Princeton University. *The Book and Paper Group Annual* 13, 49-55.

**10:** Folder housing single fragment





ARCHIVAL PRODUCTS

## Contact Us



**Phet Louvan**  
Account Representative  
phetl@archival.com  
866-658-1083

Call or email today to discuss preservation solutions for your collection.



**Janice Comer**  
Division Manager  
janicec@archival.com  
866-518-1081

The screenshot shows the Archival Products website. The top navigation bar includes links for 'Our products', 'How to Order & Sample', 'About us & Contact', and 'Newsletter'. The main content area features a section for 'Spine Wrap™ Pamphlet Binders' with a description of the product and a list of specifications. Below this, there is a table of products and their prices. The bottom section of the screenshot shows a 'Our Products' section with images of various archival products.

PRODUCT	NEW PRICE	OLD PRICE
1.000	\$1.00	\$1.00
1.001	\$1.01	\$1.01
1.002	\$1.02	\$1.02
1.003	\$1.03	\$1.03
1.004	\$1.04	\$1.04
1.005	\$1.05	\$1.05
1.006	\$1.06	\$1.06
1.007	\$1.07	\$1.07
1.008	\$1.08	\$1.08
1.009	\$1.09	\$1.09
1.010	\$1.10	\$1.10
1.011	\$1.11	\$1.11
1.012	\$1.12	\$1.12
1.013	\$1.13	\$1.13
1.014	\$1.14	\$1.14
1.015	\$1.15	\$1.15
1.016	\$1.16	\$1.16
1.017	\$1.17	\$1.17
1.018	\$1.18	\$1.18
1.019	\$1.19	\$1.19
1.020	\$1.20	\$1.20
1.021	\$1.21	\$1.21
1.022	\$1.22	\$1.22
1.023	\$1.23	\$1.23
1.024	\$1.24	\$1.24
1.025	\$1.25	\$1.25

Visit our web site at  
[www.archival.com](http://www.archival.com)

**LBS/Archival Products**  
P.O. Box 1413  
Des Moines, Iowa 50316-1413  
800-526-5640 515-262-3191  
Fax 888-220-2397  
custserv@archival.com