

# Hogg Family Artifacts Preservation and Storage Needs Assessment



Hogg Foundation  
*for* Mental Health

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## Table of Contents

1. Executive Summary.....	4
2. History.....	5
3. Preservation Management.....	5
3.1 Policy.....	5
3.2 Emergency Planning.....	6
3.3 Collection Preservation and Conservation.....	7
4. Environment.....	7
4.1 Temperature and Relative Humidity.....	7
4.2 Light.....	13
4.3 Housekeeping.....	13
4.4 Pest Control.....	14
4.5 Mold.....	15
4.6 Care and Handling.....	15
4.7 Security.....	16
4.8 General Storage and Shelving.....	17
5. The Collection.....	17
5.1 Exhibition of Items.....	18
5.2 Furniture.....	18
5.3 Textiles.....	20
5.4 Metal Objects.....	23

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<b>5.5 Ceramics and Glass.....</b>	<b>27</b>
<b>5.6 Currency.....</b>	<b>29</b>
<b>5.7 Jewelry.....</b>	<b>30</b>
<b>5.8 Other Objects.....</b>	<b>32</b>
<b>6. Conclusion.....</b>	<b>35</b>
<b>7. Resources.....</b>	<b>36</b>
<b>8. References.....</b>	<b>37</b>

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# 1. Executive Summary

A graduate student from the School of Information at the University of Texas at Austin performed a Preservation and Storage Needs Assessment at the Hogg Foundation for Mental Health during the Spring of 2018. The goal of the assessment was to review and document the objects included in the Hogg Family Artifacts and recommend care and storage methods based upon best practices and feasibility of the methods. The scope of the project included an inventory which referenced a current appraisal of the items, documentation of the conditions of the items and a preservation needs assessment of the storage space. The preservation needs assessment was performed by collecting environmental data about temperature, relative humidity and light with the use of HOBO dataloggers, inspection of the storage area and its physical collections, and conversations with the archivist of the Hogg Foundation for Mental Health.

Three dataloggers were placed in the archive for four weeks, both in the main storage area and an ante room, to record temperature, relative humidity and light data every fifteen minutes. Every week, data was collected and recorded in the HOBO computer application. In addition, interviews were conducted with Elizabeth Stauber about the practices, policies, and concerns of the institution in regards to preservation. While reviewing the objects in the collection, notes were recorded on observations of the physical condition and current storage, and compiled into what would become the inventory. During the review and inventorying of the collection, images were taken of the objects, including any condition issues that were noted.

Elizabeth Stauber is very knowledgeable about basic preservation principles, however her main concerns have been the preservation of paper and paper based objects, as well as digital artifacts, as these constitute the main holdings of the archive. The objects in the Hogg Family Artifacts collection are more typical of items found in museum holdings and often require different storage needs than most paper based objects. This report includes suggestions for both the storage of the artifacts and general preservation needs for the entire archive. Outlined below are some short term and longer term goals for the preservation and storage of the Hogg Family Artifacts:

## Short Term Goals: Within One Year

- Properly store deteriorating artifacts, such as textiles, to prevent further deterioration.
- Purchase dataloggers to continue monitoring temperature and relative humidity levels in archive.

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## Long Term Goals: Within Three Years

- Properly store objects that are in more stable condition to prevent any future deterioration or damage.
- Create an emergency plan.
- Create a preservation policy.
- Address any temperature and relative humidity fluctuations in archive.

## 2. History

The Hogg Foundation for Mental Health was established by the children of Texas Governor James Hogg in 1940, with the original endowment coming from the estate of the eldest child, Will Hogg. Ima Hogg, Will's sister, and Mike Hogg, his brother, established the Hogg Foundation for Mental Hygiene at the University of Texas in Austin to provide a "mental health program for the people of Texas."

The Hogg Foundation became the first of its kind in the state of Texas. The first professionally managed foundation, the first privately funded foundation to be housed within a public university and the first private foundation focused on mental health. The activities undertaken by the Foundation today include: grantmaking; research; education; thought leadership; policy.

## 3. Preservation Management

A preservation management program at the Hogg Foundation for Mental Health should include large, practical institution plans such as an official preservation policy and smaller tasks taken to preserve individual collections. The following sections outline the largest portions of a prospective preservation management plan: the creation of a written policy and emergency preparedness plan and a discussion of the need of attention to specific collections.

### 3.1 Policy

While good preservation practices already occur at the Foundation, creating a written preservation policy will enhance current preservation practices by clearly stating institutional goals and priorities. A written preservation policy should be guided by the mission of the Foundation, ensuring that common values relating to the collections become a part of everyday tasks to long-term decision making. In addition, it should be general enough that

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specific plans and procedures may follow the preservation policy and build upon its basic principles. Therefore, the archivist of the Foundation should perform the following tasks:

- Create a written preservation policy that includes the institution's mission, specific preservation goals that support that mission, and a guide for strategic planning.
- Share policy with the Foundation staff to educate important stakeholders on standards that have been established.
- The British Library Preservation Advisory Centre has a good publication on building a preservation policy. Please see the resources section for additional information.

## 3.2 Emergency Planning

Creating an emergency plan is an important part of stewardship and preservation. Because the Foundation does not currently have an emergency plan, they face the risk of being unprepared to respond to a number of disasters such as a flooding, fires, etc.

Creating an emergency plan should include the following items:

- An outline of various disasters that could occur at the Foundation and pragmatic steps to take in response.
- Written steps to attend to emergencies that occur with the building and in regards to specific collections.
- Important contacts for the event of an emergency.
- Consult sources such as the NEDCC's Emergency Management pamphlets (<https://www.nedcc.org/free-resources/preservation-leaflets/3.-emergency-management/3.3-disaster-planning>) which includes numerous other sources.
- One option for creating a disaster plan is following the dPlan (<http://www.dplan.org/>), an online tool for creating a disaster plan for non-profits. A minimum approach is to create something similar to the Pocket Response Plan created by the Council of State Archivists (<https://www.statearchivists.org/programs/emergency-preparedness/emergency-preparedness-resources/pocket-response-plantm-prep-tm-english-template/>)

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## 3.3 Collection Preservation and Conservation

Attention to specific collections should be an important part of the Foundation's preservation management program. While steps have been taken to store some of the Hogg Family artifacts in acid-free boxes, all of the objects in the collection would benefit from proper storage. In addition, steps should be taken to ensure the ongoing care of the textile artifacts at the Foundation as well as any other objects that show signs of deterioration. The following list details collection priorities that should be attended to:

- Fragile artifacts that are being stored in a way that exacerbates the deterioration.
- Artifacts stored in improper boxes and wrapped in newspaper or other acidic paper.
- Artifacts that are exposed to the environment as they are not currently stored in a box or other closed container.
- Temperature and humidity fluctuations in the archive.

## 4. The Environment

### 4.1 Temperature and Relative Humidity

Temperature and relative humidity are difficult to maintain in a building that was not created with an archive space in mind. However for collection preservation, maintaining an environment in which the temperature and relative humidity fall within a limited range and are kept relatively stable is of great importance. Not only does the temperature and relative humidity, if too high, directly affect collection materials, causing swelling, warping, softening and deformation, they also increase the risk of damage due to pests and molds. When the relative humidity is too low, which often occurs in heated buildings with no added humidity control, items can become dry and brittle. If possible it is best to keep the temperature below 70 degrees F. and the humidity levels between 30% and 50%. Temperature and relative humidity should be monitored to ensure that temperatures and relative humidity levels do not fluctuate rapidly or become too high or too low.

#### Current Status

The temperatures in the archive are set at 70 degrees F. in the summer and winter. Currently there is no way to adjust the humidity levels in the archive other than raising or lowering the temperature using the HVAC system. Temperature and relative humidity levels are currently not being monitored.

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Because the area housing the collection shares an HVAC system with other office space not occupied by the Foundation, maintaining a low stable temperature and relative humidity will be difficult. Since the space shares an HVAC system with spaces used by humans, lowering the temperatures below 70 degrees, especially in winter, is not feasible. Dataloggers should be purchased so that at least a year's worth of temperature and relative humidity levels can be collected. This will give a greater idea of how much the temperature and relative humidity fluctuate with changing seasons and extreme weather patterns. If it is noticed that the temperature and relative humidity fluctuate greatly throughout the year, purchasing dehumidifiers to keep the relative humidity below a certain point, thereby at least minimizing relative humidity fluctuations, should be considered.

### **Data Collection**

Data was collected using HOBO dataloggers over a four week period. The dataloggers read and collected the temperature, humidity levels and light levels in an area every fifteen minutes, giving us an overview of the changes in temperature, humidity and light throughout the day for the four weeks that they were in the archive. If possible, data should be collected over a period of at least a year to give an accurate idea of how the temperature and humidity levels change with both the changing seasons and weather patterns. Three dataloggers were installed in the archive, two in the archive space and one in the anteroom. The data collected from each datalogger is shown below:



**Archive #1** (datalogger 166)

Temperature:

Min. – 66 degrees F.

Max. – 73 degrees F.

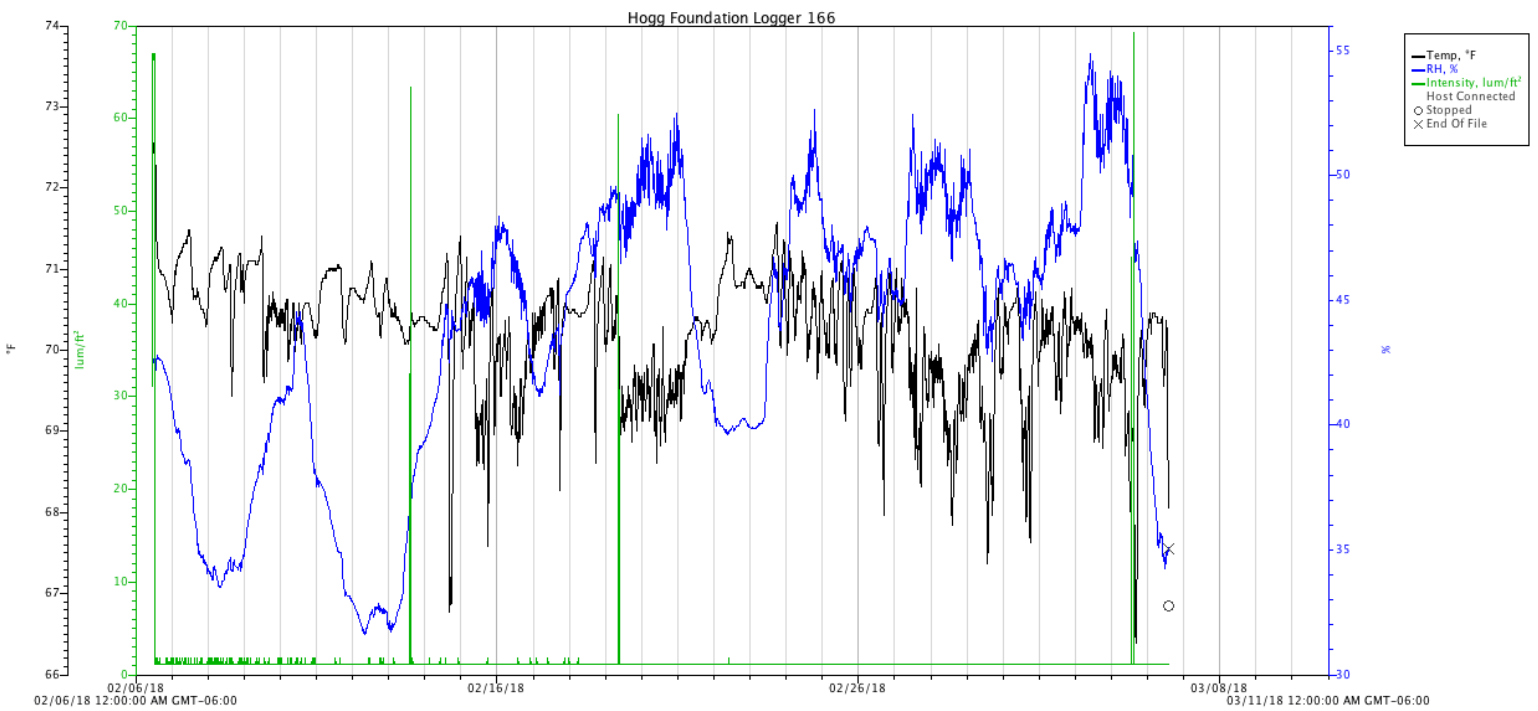
Avg. – 70 degrees F.

Relative Humidity:

Min. – 32%

Max. – 55%

Avg. – 44%



**Archive #2** (datalogger 167)

Temperature:

Min. – 67 degrees F.

Max. – 74 degrees F.

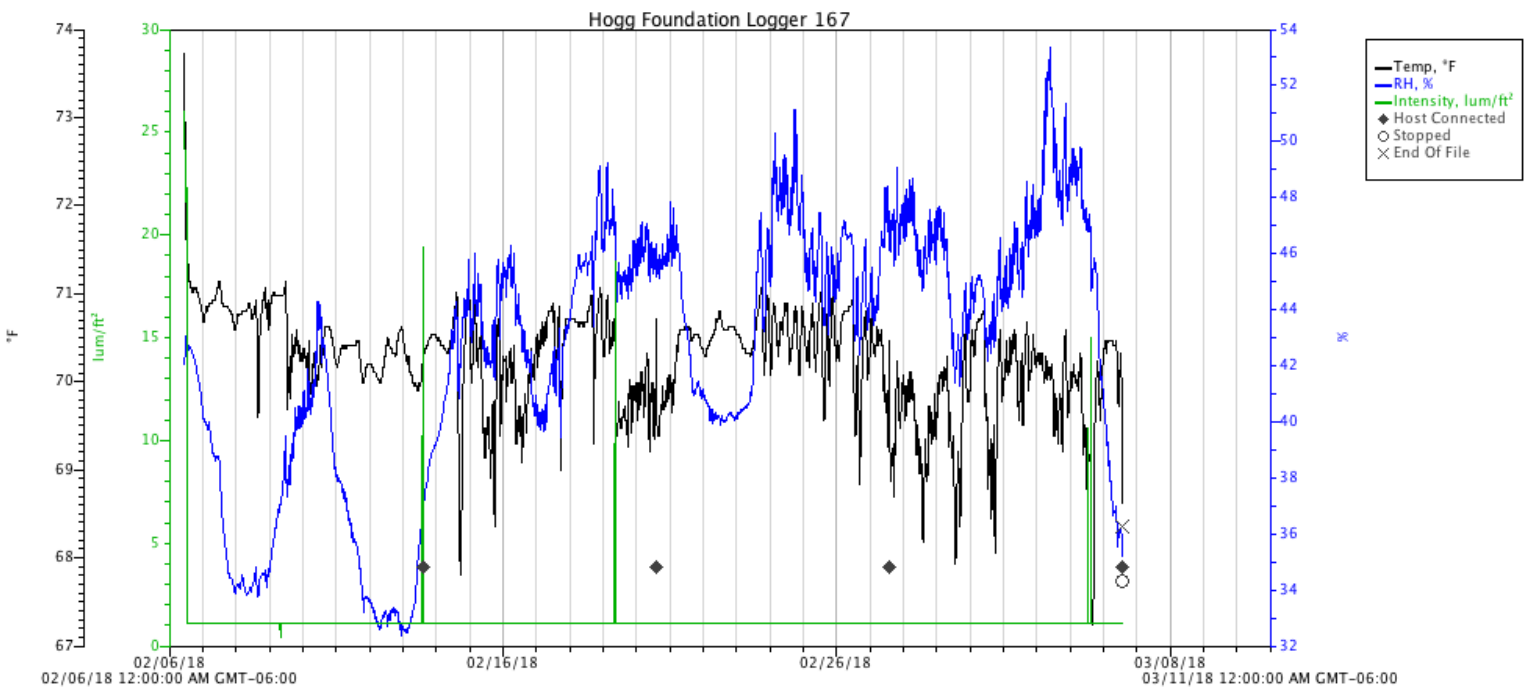
Avg. – 70 degrees F.

Relative Humidity:

Min. – 32%

Max. – 53%

Avg. – 42%



## Anteroom (datalogger 168)

Temperature:

Min. – 69 degrees F.

Max. – 74 degrees F.

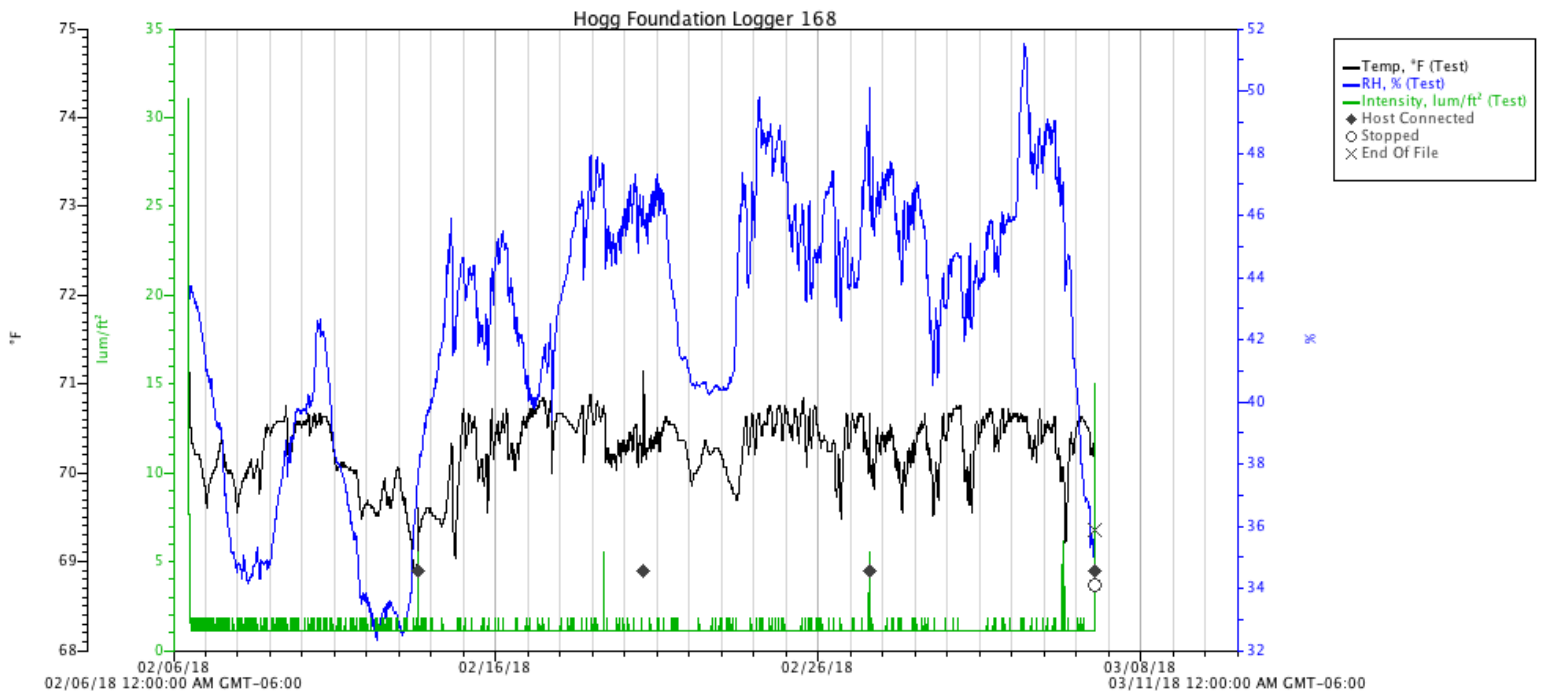
Avg. – 70 degrees F.

Relative Humidity:

Min. – 32%

Max. – 52%

Avg. – 42%



Although the temperature is set at 70 degrees, there are fluctuations of up to 4 degrees warmer and cooler, even while averaging approximately 70 degrees. This is not uncommon with HVAC systems which heat or cool to a temperature a few degrees above or below the set temperature and allow the temperature to reach a few degrees above or below the set temperature before turning on. The humidity levels are not being regulated at all with the HVAC system, which again, is not unusual for most systems. According to the Canadian Conservation Institute, collections kept within the range of 25% relative humidity to 75% humidity can have risks of mechanical damage to high vulnerability objects, moderate risk

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to most paintings, most photographs, some objects, some books, and tiny risk to many objects and most books. Fluctuations in humidity can be dangerous to collections as objects can react to changes in humidity levels, and if they are not free to expand and contract with the changes in humidity damage can occur. Since the humidity levels in the archive fluctuated by 20% during the time monitored, from a low of 32% on February 13, 2018 to a high of around 54% on March 4, items with medium to very-high sensitivity could have accrued damage. Fluctuations of 20% might cause a problem with items in the archive that fall into the various categories of sensitivity to fluctuations. Items in the medium sensitivity category, such as photographs, negatives, film, magnetic media, inks on parchment, or book bindings of vellum and leather, have a risk of slight damage from delamination, fracturing or distortion. Furniture items in the medium sensitivity category, including plain wood items with tight joints and no prior splits, or items with veneers or marquetry that covers a continuous piece of furniture made with plywood, have a risk of slight damage from cracking, splitting, delamination, or distortion. Items in the high sensitivity category, such as thick oil-resin images on cloth or paper and objects that have damage from UV exposure, or furniture with veneer over corner joints or applied ornaments, have a risk of a small amount to a severe amount of damage from delamination, fracturing, cracking, splitting or distortion. Items in the very high sensitivity category, such as large paper or cloth objects adhered to stretchers or at corners by adhesive, or furniture with attached or inlaid metal, horn, shell, etc. can have a risk of severe damage. However, it should be noted that severe damage to collection objects is unlikely given the types of items in the collection and the fact that most of the items have probably been exposed to fluctuations at least as great as 20% and probably greater. Any movement or damage has most likely already occurred. However, should the relative humidity rise above 65% and the temperature stay above 70 degrees for an extended period time, which can occur in the summer in Texas, there is a greater chance of mold growth.

### Recommendations

- Lower the temperature on the HVAC system if possible.
- Monitor the temperatures and relative humidity in the archive using dataloggers.
- Purchase dehumidifiers to help maintain a more stable relative humidity. Ivation has dehumidifiers that can pull up to 30 pints a day from rooms up to 2,000 square feet and are available through Amazon. ([https://www.amazon.com/dp/B071G3XXR8/ref=sspa\\_dk\\_detail\\_3?psc=1&pd\\_rd\\_i=B071G3XXR8&pd\\_rd\\_wg=1uuJ3&pd\\_rd\\_r=GGXD68WTHZ8B0N9SBE5T&pd\\_rd\\_w=p20Ud](https://www.amazon.com/dp/B071G3XXR8/ref=sspa_dk_detail_3?psc=1&pd_rd_i=B071G3XXR8&pd_rd_wg=1uuJ3&pd_rd_r=GGXD68WTHZ8B0N9SBE5T&pd_rd_w=p20Ud))

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- Monitor items in collection with medium to very high sensitivity to humidity fluctuations for developing damage.

## 4.2 Light

Light can be one of the most damaging things that collections are exposed to on a regular basis. For paper, light causes yellowing and embrittlement. Light can bleach or yellow fabrics and, much like paper, cause fabrics to become brittle. It can bleach and dry out wood and damage furniture that is both upholstered and not upholstered. Damage caused by light is also cumulative and cannot be reversed. Once items are damaged by light, they may become unsuitable for use or display. For storage it is recommended that light levels do not exceed 50 lux and for display light levels should not exceed 100 lux.

### Current Status

The amount of light in the archive is below recommended levels. Even when the lights in the archive are on, the light levels do not exceed 50 lux. When the lights are turned off, the light levels in the archive are steady at approximately 1.1 lux and the light levels in the anteroom fluctuate between 1.1 lux and 1.8 lux possibly due to the emergency lighting at the entrance.

### Recommendations

- We have no recommendations for the archive as the light levels do not reach dangerous levels.

## 4.3 Housekeeping

Regular housekeeping can be critical to the preservation of collections. Dust can damage the collections and attract pests which can harm collections. Regular cleaning can also help with monitoring the collection to insure that any outbreaks of mold or pest infestations are caught before they become an issue and permanently damage items in the collection.

### Current Status

Currently, housekeeping is done by the same janitorial staff that cleans the rest of the building. It is unknown how often the archive is cleaned.

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## Recommendations

- If it is noticed that the janitorial staff is not cleaning the archive as often as necessary, set up a schedule to dust the items in the archive that are not stored in boxes or bags.
- If janitorial service is not maintaining the cleanliness of items not in the archive, such as the Will Hogg's desk, it will be up to the Hogg Foundation to make sure that they are cleaned and dusted on a regular basis.
- See [http://ccha.org/uploads/media\\_items/collections-housekeeping-guide.original.pdf](http://ccha.org/uploads/media_items/collections-housekeeping-guide.original.pdf) for a guide to daily, weekly, monthly, quarterly and yearly housekeeping tasks.

## 4.4 Pest Control

Pests can be very damaging to collections. Insects like to eat the starches used in adhesives as well as paper, fabric and wood. They can also leave damaging secretions on collection items. Rodents will chew up paper and other materials and make nests using collection materials and their feces can also be damaging to collections. Pests such as silverfish, cockroaches, and booklice can be a particular problem as the environments they like, warm, humid and dark with plenty of food sources like books and other papers, are common in archival and museum collections in Texas. Integrated Pest Management, which is focused on preventing problems before they start is the favored approach for museums and archives. Regular cleaning of collection items and display and storage areas, prohibiting food and drink in the archive, not allowing trash to collect in trash cans, and making sure entrances to the archive are properly sealed are the best ways to prevent pest infestations. It is preferred that pesticides or chemical treatments are not used in the archive as they can both damage the collection and are harmful to staff.

### Current Status

Pest control for the building which houses the archive is done by the University of Texas. It is unknown whether they spray for pests inside the building.

### Recommendations

- Clean and check collection items regularly to prevent pest infestations.
- Place sticky traps along walls, in dark corners, and under shelving units so that any pest activity is noticed.

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- Lower the temperature of the museum to at least 65 degrees during the summer if possible, as most pests prefer a warmer environment.
  - Keep relative humidity on the low side as most pests prefer a more humid environment.
  - Only allow pest control sprays outside of the building and use other methods of control, such as cleaning and lowering temperatures, inside the archive.

## 4.5 Mold

Mold can be as damaging to collections as pests. Much like pests, mold prefers a warm and humid environment. As is the case for pests, one of the best ways to limit damage by mold is by cleaning and monitoring collection items. Mold damages primarily paper collection items by breaking down chemical bonds between paper fibers, and leaving stains that can obscure written and illustrated information, however it also affects textiles in a similar manner, and it can cause damage to wooden objects and furniture. If mold is found on any items, isolation of the infected items will help to stop the mold from spreading. Keeping the temperature below 70 degrees F and relative humidity below 50% will limit the growth of molds. Mold grows when the relative humidity of an environment is above 65% for 72 hours or more.

### Current Status

No mold was seen on items in the collection.

### Recommendations

- Monitor collection items for possible mold outbreaks.
- Keep temperature below 70 degrees F and humidity levels between 30-50% to prevent mold.

## 4.6 Care and Handling

Improper care and handling of collection items can be damaging to every item in the collection, especially items that are already delicate or deteriorating. The best way to prevent damage caused by improper care and handling is by training anyone who has access to the collection in the proper way to handle items in the collection, especially those that are fragile. Cleaning staff should be made aware of the proper way to care and clean items on display in the collection, primarily the furniture that is not in the archive. Proper

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storage, so that items are not stacked upon each other or crammed onto shelves, is also part of care and handling. Items should be stored so that it does not take an undue amount of force or of moving other items in order to access them. It should be noted that the use of gloves is no longer recommended for handling paper and bound materials as they can actually cause more damage than they mitigate. It is now recommended that prior to handling materials, individuals wash and dry their hands thoroughly.

### **Current Status**

The majority of the items in the collection are stored in a locked room and are not accessible to the public. In the archive, the items are not stacked or stored in a way that could incur damage while retrieving them from storage.

### **Recommendations**

- There are no recommendations at this time.

## **4.7 Security**

Security is of great importance in the protection of the collection. Improper security can lead to thefts and vandalism of items in the collection. Storage areas should be kept locked until it is necessary to access items and in areas of display, visitors should not be allowed alone with any items that are not secured in locked cases.

### **Current Status**

The majority of the items in the collection are stored in a locked room to which there are a limited number of keys. The few items on display throughout the office are generally too large to be easily removed, or are placed on display in locked cabinets.

### **Recommendations**

- There are no recommendations at this time.



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## 4.8 General Storage/Shelving

Materials found in archives, libraries and museums all have differing storage conditions that are considered ideal, however there are a few standards that are acceptable for the majority of the materials. With the exception of film, materials should be stored within a temperature range of 50 to 70 degrees F and with humidity levels between 30-50%. Preferably, the temperature and humidity levels should be kept on the lower side, closer to 50 degrees F and 35% humidity, with little fluctuation in temperature and humidity.

Collection items should always be stored on metal shelving, as wood shelving can be detrimental to the health of a collection, and always kept at least 4 inches off the floor in case of flooding. Paper items and textiles should be stored in acid-free boxes, with papers contained in acid-free folders and textiles wrapped in acid-free tissue. Most objects should be kept in closed cabinets or wrapped in acid-free, unbuffered tissue and stored in acid-free boxes or, in the case of some metal objects, in polyethylene bags.

### Current Status

At this point, the majority of the Hogg Family artifacts are being stored improperly as they are either in cardboard boxes or no boxes at all. However, the shelving units in the archive are powder-coated steel and are ideal for archival storage purposes and the majority of items are stored at least 4 inches off of the floor. For item-specific storage, please see Section 5, The Collection.

### Recommendations

- See Section 5 for recommendations.

## 5. The Collection

Most of the collection is in an acceptable condition, showing damage consistent with its use by the Hogg Family. However there are some items that will require special storage accommodations in the near future. In this section, we will first address overall collection concerns and then go into specific recommendations for the various types of items housed in the archive.

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## 5.1 Exhibition of Items

Generally, items are at most risk when they are on exhibition, however this is not often a concern for the items in the Hogg Family collection. Exposed to environmental conditions and occasionally open to visitor and staff handling, damage can happen quickly and irrevocably. Although there are differing ideal exhibition practices for various types of materials, there are some general standards that can be addressed. Many items, while they may seem to have passed the test of time and appear sturdy, can in fact still be vulnerable to further handling that may occur during exhibition. While on display, objects should be safely secured in locked cases or out of reach of visitors. Since damage from factors such as light accumulate over time and are irreversible, it is recommended that no objects stay on display permanently, but are rotated on a schedule to lengthen their usable life.

### Current Status

The Foundation does not often display items in the Hogg Family collection and when on display, they are kept in locked cabinets.

### Recommendations

- There are no recommendations at this time.

## 5.2 Furniture

Furniture generally prefers an environment similar to that enjoyed by humans, 70 to 75 degrees with a relative humidity of 35% to 65%. Wood, the primary construction material of most antique furniture, is very absorbent and fluctuations in temperature and relative humidity can cause cracking, lifting of veneers, and gaps in joints. It is best for furniture to live in an environment with steady temperatures and stable relative humidity to minimize any damage that can be caused by fluctuations. Light can also cause damage to furniture: finishes can bleach or darken with exposure to light; and light can cause accelerated aging and degradation of furniture finishes. Light also damages upholstery by bleaching and weakening textile fibers. Water can cause damage to furniture pieces, creating white areas in a finish or, if allowed to seep below the finish, damaging the wood itself by causing localized swelling which can cause lifting of veneers or cracking.

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## Current Status



Image 1

Cracking and separation in top of library table.

they are at a low risk of any damage occurring.

The only piece of furniture that might be used is a coffee table in an office. It is recommended that this piece be used as decoration only and that any food, drinks, or items containing liquids, be kept off of the surface of the table. The furniture is mostly in good to very good condition, showing general wear consistent with use. The only items that show more than expected wear are the library table (Image 1), which is missing areas of wood and veneer and has a broken foot, and the 12-panel Asian Screen which has noticeable cracking (Image 2) in the body of the image in panels 1 through 4, loss of fabric at the border of all the panels, and discoloration in panels 7 through 12.

For storage, furniture is generally best in cool and

dry conditions, however as most of the items are acclimated to the temperatures and

Much of the furniture is stored in the archive and is not currently being used or displayed. However, there are a few furniture items that are on constant display in the offices of the Foundation. Although the furniture may appear sturdy, old pieces may have acquired structural weaknesses that are not immediately obvious. They should therefore be handled with care and not used if possible. Of the items on display, Will Hogg's Desk and Desk Chair have signs asking that people not use the desk or rope across the chair to prevent someone sitting in it and two of the chairs are on display in a conference room. Although Will's desk and chair are in very good condition, on the day of my appraisal of the pieces, it was noted that they were very dusty. Two of the furniture items are on display on walls, either in a conference room or in an office. As long as most of the items are being handled properly during any cleaning,



Image 2

Cracking in the body of the screen

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humidity levels in Texas, there should be minimal damage that occurs from changes in temperature and relative humidity. Monitoring of the furniture is recommended so that any damage or deterioration are noted and steps can be taken to mitigate any further damage.

### Recommendations

- Do not allow use of furniture that is on display.
- Items on display should be kept clean and gently dusted on a regular schedule.
- Consult conservator for repairs needed to the Asian Screen and library table.

## 5.3 Textiles

As complex objects often made from organic materials, textiles can be vulnerable to a number of dangers. They easily accumulate dust and other pollutants, expand and contract varying amounts in reaction to temperature and humidity fluctuations, can fade and become brittle through light exposure, and are vulnerable to physical damage due to their commonly composite nature. Light can be extremely damaging to textiles, causing yellowing and dyes to fade, and, especially in the case of silk, cause shattering and embrittlement and should therefore be as controlled as possible when on exhibition, and preferably eliminated when in storage. Textiles should not be heavily folded or layered into boxes, ideally they should be laid flat in boxes or rolled. Maintaining steady a temperature and stable relative humidity are important to mitigate damage caused by expansion and contraction, and covering the textiles protects them from damage caused by light and pollutants.

### Current Status

Currently, all of the textiles in the Hogg Family collection are folded and stored in acid-free or cardboard boxes, except the rug which is simply rolled and stored on a shelf, a set of twelve crochet buttons which are stored in the metal storage box, and an embroidered sampler which is framed and leaning up against a wall on the floor. Some of the textiles, primarily the table linens, are in good condition with some discolorations and staining but few noticeable holes and no missing embroidery or lace. The rug is in



Image 3

Area of missing embroidery thread.

very good condition, with some wear to the fringe and a little bleeding of the red dye in a small area. There is a small pink and cream linen handkerchief that has multiple small holes



Image 4

Shattering of silk fibers

and staining, but is otherwise structurally stable, folded and stored in the metal box. The twelve crocheted buttons, which are stitched onto a piece of paper with a tissue cover adhered to it, are in very good condition. The embroidery sampler is in good condition, with some staining and discoloration to the body of the piece. However, there are areas of missing embroidery where the thread either disintegrated or was removed at some point (Image 3).

The most delicate of the textiles, the silk and wool shawls, an oriental garment border and a piece of embroidered netting, are in various states of deterioration. The silk shawls, with the exception of a large silk shawl with tonal embroidery and a smaller cream shawl with a floral printed design, show signs of shattering and the weakening of silk fibers (Images 4 and 5). All of the silk textiles have staining and spotting. The two wool shawls have staining and spotting, show signs of previous insect damage (Image 6), and have areas of detached or damaged fringe. The oriental garment border, which has both silk and metal embroidery, has areas of shattering both in the embroidered textile and the non-embroidered silk lining. There are also areas of missing metal thread in the embroidery (Image 7). The embroidered netting piece is extremely deteriorated, and is in danger of completely falling apart (Image 8).

### Storage Recommendations

The table linens, with the exception of the yellow machine lace tablecloths and the yellow cotton/polyester blend tablecloth which can be stored folded in an acid-free box, as well as the linen handkerchief should be stored in boxes large enough for them to lie flat, with unbuffered acid-free tissue placed between the textiles. The only item that will not be able to lie flat will be the table



Image 5

Shattering silk endangering the embroidery of the piece

runner, however it can safely be folded with rolled batting or tissue placed into the folds to prevent creasing. Before storing the textiles, they should be inspected carefully for signs of insects or mold and carefully cleaned. The oriental garment border can also be stored in a box at least long enough that it will need minimal folding to fit inside, with rolled tubes of batting or tissue placed into the folds to prevent creasing. The netting piece, as it is in such poor condition, will need a custom storage mat, easily made from unbuffered 4-ply mat board and acid-free tissue (see resources for instructions on making the mat). Once the netting is supported by the custom mat, it can be placed into an acid-free box. At this point, I see no reason to remove the embroidered sampler from the frame, however it should be stored so that it is protected from light, preferably in an acid-free box. If there are any concerns regarding the deterioration of the thread in the sampler, a textile conservator should be



Image 6

Previous damage to wool shawls, possibly cause by insects

consulted. The crocheted buttons can be stored on the paper to which they are attached and stored in an acid-free box with other small items.



Image 7

Shattering and deteriorated metal embroidery on Oriental Garment Border

The larger textiles, primarily the silk and wool shawls and the rug, will be best stored rolled. Prior to storage, the textiles should be thoroughly inspected for insects and mold and gently vacuumed. The shawls should be rolled on tubes at least three inches in diameter and long enough that the textile, including any fringe, will have no creases or folds while rolled. Prior to rolling the textiles onto the tube, a layer or two of unbleached muslin should be rolled around the tube, then a layer or two of unbuffered, acid-free tissue should be placed onto the muslin, before laying the textile out on top of the muslin and

runner, however it can safely be folded with rolled batting or tissue placed into the folds to prevent creasing. Before storing the textiles, they should be inspected carefully for signs of insects or mold and carefully cleaned. The oriental garment border can also be stored in a box at least long enough that it will need minimal folding to fit inside, with rolled tubes of batting or tissue placed into the folds to prevent creasing. The netting piece, as it is in such poor condition, will need a custom storage mat, easily made from unbuffered 4-ply mat board and acid-free tissue (see resources for instructions on making the mat). Once the netting is supported by the custom mat, it can be placed into an acid-free box. At this point, I see no reason to remove the embroidered sampler from the frame, however it should be stored so that it is protected from light, preferably in an acid-free box. If there are any concerns regarding the deterioration of the thread in the sampler, a textile conservator should be

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tissue. The muslin will support the textile for any future unrolling and the tissue will prevent any wear or abrasion by the muslin. Another layer of tissue should be placed on top of the textile, and if the textile is embroidered or has fringe, a layer of polyester batting should be placed on top of the tissue. Once the muslin, tissue, textile, tissue, and batting sandwich is created, the textile can be rolled, taking great care not to create any creases or folds in the textile. Once rolled, the textiles should be covered in a muslin cover loosely tied on with unbleached cotton tying tape. A label with the accession number should be attached to the textile so that there is less of a need to unroll the textile. The muslin cover should provide protection from dust, light and insects, however the textiles should be inspected and re-rolled regularly, preferably once a year, but at least every few years. As space is limited in the archive, the rolled textiles can be stored on an upper shelf, with blocks of ethafoam providing support so that the textiles do not lie directly on the shelving unit. The rug can also be rolled onto a cardboard tube if desired, however, it can also be rolled between layers of muslin without the tube, as the muslin will help to protect it from light, dust and insects.



Image 8

Shattering of embroidered netting.

## 5.4 Metal Objects

Metal objects are at risk of corrosion when stored improperly. They are also at risk of physical damage, such as dents and scratches, from improper storage. Metals that show no signs of corrosion can be stored at the same relative humidity levels, between 30% and 50%, as other collection items. However, should relative humidity levels consistently exceed 55%, corrosion can become more of an issue and metal objects should be stored in a humidity-controlled storage area. Items that are corroded will need to be stored at relative humidity levels below 35%. Metal objects need to be kept as free of dust as possible, as dust contains moisture that can accelerate any corrosion. Proper storage for most metal objects include either storage in closed cabinets or wrapping the item acid-free, unbuffered tissue and placing it in an acid-free box or sealed polyethylene bag.

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## Current Status

The majority of the metal objects in the Hogg Family Artifacts collection are silver or silver-plate tableware, with a few non-silver items. Smaller items, such as serving spoons, silverware, smaller serving pieces, and the desk set and inkwell are currently being stored



Image 9

Discoloration and bubbling of silver-plate on bottom of serving tray

wrapped in various types of paper or tissue, inside cardboard boxes. The larger items are sitting out on a table in the anteroom with tissue paper in between items that are stacked. The items are mostly in good to very good condition showing wear consistent with use by the Hogg Family, most notably scratches or dents on the serving pieces and desk set items. The candlesticks are missing a noticeable amount of silver-plating, most likely removed during polishing, one of the serving trays has discoloration and bubbling of the silver-plate on the bottom most likely due to improper storage and cleaning methods in the past (Image 9), and one of the decorative serving pieces has some

corrosion of the base metal (Image 10).

The non-silver metal objects in the collection are: a copper and brass bowl that belonged to Will Hogg; a German Military pistol that belonged to Mike Hogg; a bronze and silver desk set; an enameled inkwell; an ivory and brass letter opener; a brass and wood bell; a tin cigar box; an engraved portrait of Will Hogg in a tattered paper envelope; and a metal box that currently contains smaller collection items. The pistol is in good condition and is currently stored within the metal box wrapped in a canvas bag. The desk set, enameled inkwell, and brass and wood bell are in good condition and are wrapped and stored inside a cardboard box. The letter opener has a crack in the ivory (Image 11) and should be checked regularly for further deterioration of the ivory and is also wrapped and stored in a cardboard box. The tin cigar



Image 10

Corrosion on base metal of silver-plate serving piece



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box is in good condition with the exception of the paper label which is missing in areas and discolored. It is also stored in a cardboard box. The copper and brass bowl has noticeable corrosion (Image 12) and is wrapped in paper and stored in a cardboard box. The engraved portrait is in very good condition, however the paper envelope and a printed version of the portrait are in multiple pieces.

### Storage Recommendations

The silver and silver-plate items can be stored wrapped in acid-free, unbuffered tissue in either an acid-free box or a sealed polyethylene bag. If humidity or tarnishing is a concern inside the sealed bags, small containers of desiccated silica gel and activated charcoal can be placed inside the bag with the silver pieces, however the silica gel would need to be reconditioned occasionally. I recommend

wrapping the smaller silver items in acid-free, unbuffered tissue and placing them into acid-free boxes. For the silverware, the small serving spoons, the ladle, and the milk or syrup pot, the manuscript boxes already owned by the archive should be of sufficient size. There are two serving pieces currently stored in cardboard boxes that can also be wrapped in tissue and stored in an acid-free box, however a box will need to be



Image 11

Crack in ivory portion of letter opener

purchased for these items as the manuscript boxes will be too small. The candelabras will also need a larger box for storage. These items should fit into standard record storage

boxes. The larger serving trays and the punch bowl currently on a table in the anteroom can be stored in boxes, however the sizes of the pieces might make that impractical. I

recommend wrapping the larger serving pieces in acid-free tissue and placing them into polyethylene bags that are large enough to contain the items and taping them closed. To keep moisture inside the bag from being an issue, place packages of desiccated silica gel inside the bag before sealing them or punch small holes in the plastic bag to allow moisture to exit the bag. In order to determine what item is in the bag without having to open them, place a tag or label on the bag with either the accession number or an image of the item.

The metal box that currently holds other smaller collection items can also be stored wrapped in acid-free, unbuffered tissue and placed into a polyethylene bag in a manner

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similar to the large silver and silver-plate objects. I would, however place a package of desiccated silica gel inside the box before storing it. The silver serving piece with the small amount of corrosion will need to be monitored to make sure the corrosion does not worsen. If there is concern about the corrosion, please consult a conservator who specializes in silver.

The pistol, which is primarily metal with wooden pieces on the handle can also be stored in an acid-free box, wrapped in acid-free, unbuffered tissue. As the piece is very heavy, I would recommend making sure that it is not placed on top of any other items and instead should be on the bottom of the box. The leather holster for the pistol can also be wrapped in acid-free, unbuffered tissue and placed into the same box as the pistol. The other metal objects, the desk set, inkwell, letter opener, brass and wooden bell, and the cigar tin can also be wrapped in acid-free, unbuffered tissue and will fit into the manuscript boxes.



Image 12

Corrosion on brass and copper bowl

The copper and brass bowl is the only non-silver object showing signs of corrosion. If this is a concern for the archive, I would consult a conservator who specializes in metal objects. Otherwise, the bowl can be wrapped in acid-free tissue and placed in an acid-free box. I would however, monitor the piece for continued corrosion and deterioration.

The engraved portrait, as it is quite small, should either be stored with other small items in a divided tray set inside an acid-free box, along with the envelope and printed portrait, or stored in an acid-free folder, with the envelope and printed portrait, in an acid-free box. Either storage will work, however the envelope and printed portrait will be best served by being placed into a paper sleeve or small acid-free envelope before placing them with the engraving so that all of the pieces can be kept together.

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## 5.5 Ceramics and Glass

Ceramics and glass items are generally at minimal risk from incorrect temperatures and incorrect or fluctuating relative humidity unless they show issues with weeping and crizzling. However ceramics and glass tend to be hard and brittle and they are at risk of damage from improper handling and can easily break, crack or shatter. Generally it is recommended that ceramic and glass items be stored in cabinets with shelves lined in a soft, non-fibrous padding where feasible. This lessens the amount of handling the delicate pieces receive as they are visible and easily found. Closed cabinets also minimize damage from dust, which can scratch the surfaces of both ceramic and glass items.

### Current Status

Currently, the ceramic and glass objects in the Hogg Family Artifacts are stored in cardboard boxes wrapped in various types of tissue paper, newspaper and bubble wrap.



Image 13

Discoloration on the handle of a teacup

should be consulted to determine the best course of action, however the tape and plastic lid should be removed before storing the bowl. The majority of the ceramics and glassware are dusty and should be cleaned before being properly stored.

Most of the items are in good to very good shape, showing scratches and wear consistent with use and some chipping, cracking and discoloration (Image 13). A few of the pieces, primarily the teapot and sugar bowl from the tea set, are more heavily damaged and one teacup from the Spode china set has a previous repair to the handle (Image 14). The teapot has a broken spout and the sugar bowl is missing the bottom. A piece of plastic has been taped into the bottom of the sugar bowl and the tape is deteriorating (Image 15). A conservator of ceramics



Image 14

Previous repair on a teacup

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## Storage Recommendations

Although ideal, closed cabinets for storing the glass and ceramic items are not feasible for The Hogg Foundation. There is simply not enough room for new cabinets in the archive. I suggest storing the objects in acid-free boxes, wrapped in acid-free, unbuffered tissue. Since these objects will not be used or displayed often, there is minimal risk of damage from handling and the tissue should provide enough padding that any vibrations that occur have little to no risk of damaging the items. I would recommend placing the boxes containing the glass and ceramic objects on a lower shelf in the archive as this lessens the chance of items being dropped if there is any need to move them. Many of the items, specifically, the teacups and saucers, smaller plate sets, the glassware, and the Hakata Urasaki doll will fit into the manuscript boxes currently owned by the Foundation. There are two sets of dinner

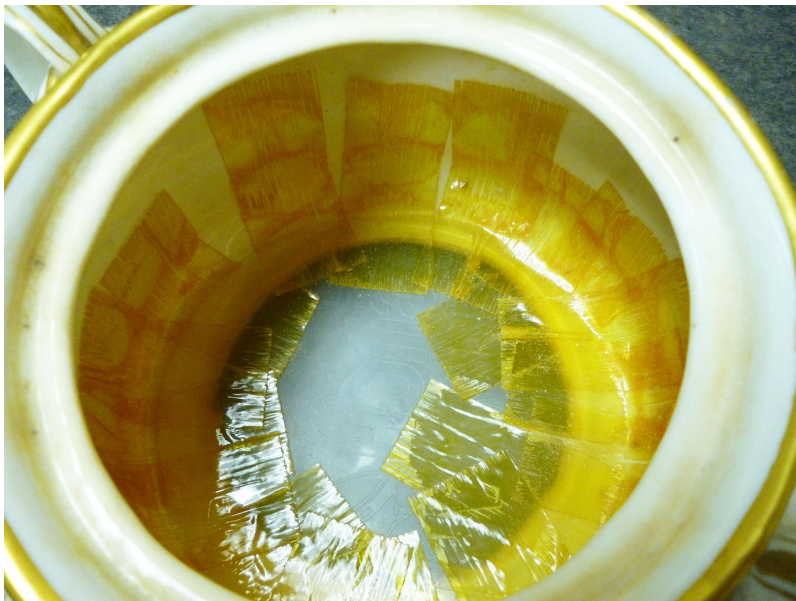


Image 15

Plastic lid taped to bottom of sugar bowl

plates, a tea set that contains some larger items, and a commemorative plate, that will need larger boxes. I recommend purchasing at least two standard record boxes to hold the plates and the larger items from the tea set. The teacups, coffee cups and saucers from the tea set will fit into a manuscript box, unless it is desired that the tea set be stored together. If possible, I would also recommend cleaning the ceramics and glassware before storing. The items can be washed in cool or lukewarm water, using no soap, detergents or abrasive cleaners, and air-dried slowly with no heat.

As the items are in good shape and show little deterioration, washing them has minimal risk of causing damage except through improper handling. However, care should be taken with the Spode teacup with the prior repair in order to not further damage the piece. The exception to the wet cleaning would be the Hakata Urasaki doll, which can be dusted with soft bristle brush to remove loose dirt and dust.

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## 5.6 Currency

Currency has similar storage needs to other metal and paper objects. Metal objects are at risk of corrosion when stored improperly. They are also at risk of physical damage, such as dents and scratches, from improper handling. Metals that show no signs of corrosion can be stored at the same relative humidity levels, between 30% and 50%, as other collection items. However, should relative humidity levels consistently exceed 55%, corrosion can become more of an issue and metal objects should be stored in a humidity-controlled storage area. Items that are corroded will need to be stored at relative humidity levels below 35%. Metal objects need to be kept as free of dust as possible as dust contains moisture that can accelerate any corrosion. Coins particularly require special storage as their size generally means that they are easily lost. Particularly valuable coins should be stored in polystyrene coin boxes which then should be placed into acid-free boxes which are sized for the coin boxes. Alternately, for coins that are of lesser value, storage can consist of small acid-free paper envelopes or archival poly flips, placed into acid-free boxes sized for the envelopes. Polypropylene or polyester pages with pockets that fit into a binder, are also acceptable storage for coins, but generally only used for short-term storage.

Paper currency should be stored in acid-free folders or paper sleeves in an acid-free box much like other paper items.

### Current Status

Currently the coins are being stored in manila envelopes inside the metal box and the paper currency is inside of a paper envelope also inside the metal box. The coins are in poor to good shape, with most showing some wear to extreme amounts of wear, primarily due to usage over the years. The United States 25 cent paper piece is in very good condition with the exception of bright pink writing on the back. The Canadian 25 cent paper piece is in worn condition with small tears in the edge and many creases and folds. If the condition of the Canadian paper currency is a concern, a conservator should be consulted, however proper storage should prevent any further deterioration. As the paper envelope containing the paper currency has information written on the outside that should remain with the collection, it should be stored with the currency.

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## Storage Recommendations

I recommend either putting the coins into paper envelopes (<http://www.coinsupplyexpress.com/2x2-coin-envelopes.html>) or polyester flips (<http://www.gaylord.com/Preservation/Artifact-%26-Collectibles-Preservation/Labeling-%26-Supplies/Saflip-Polyester-Coin-Flips-%2850-Pack%29/p/HYB02477>) and then storing the envelopes in a box sized for them. The paper envelopes are much less expensive, however they do not allow the coins to be seen without first removing them from the envelope. If this is not an issue, then I would choose the paper envelopes. The paper currency and the envelope should be stored in an acid-free folder inside an acid-free box with other paper items. Since there are a few paper items connected with this collection, purchasing a small 2 ½ inch wide document case would be recommended, so that all of the paper items in the Hogg Family artifact collection can be properly stored and not mixed in with other collections.

## 5.7 Jewelry

Jewelry requires special storage generally because the items are small and easily lost. Due to their often composite nature, they can also be at risk of damage from fluctuating temperatures and humidity levels. As with most collection items, maintaining a steady temperature under 65 degrees and a stable relative humidity between 30% and 50% is best for jewelry. As the items are often on the smaller side, they are best stored in an acid-free box with a divided tray made to store small items.

### Current Status

Most of the jewelry is in small cardboard boxes stored inside the metal box. The concha belt is wrapped in tissue inside the metal box. The jewelry is in varying conditions. The items belonging to Ima Hogg, some earrings, loose beads and a portion of a beaded necklace, are mostly broken. The collar buttons and the opal stud button are in good shape with some wear to the mother of pearl collar button. The Pope Pious XI medallions are in fair condition with



Image 16

Pope Pious XI medallions

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some wear, most noticeably a nick in the edge of one of the medallions (Image 16). The ten dollar American Indian Gold piece is in good condition, however the back has been altered to allow for engraving and a ring has been soldered to the top. The Semi-Centennial medal is in very good condition, however the box shows some wear to the exterior. The concha belt is in good condition, the silver conchas show little wear and the leather is still supple. However, the loops on the back of the conchas through which the leather is strung are corroding. They appear to have copper in them, as the corrosion is a green color. This is a cause for concern as the corrosion is staining the leather and could lead to deterioration of the leather belt (Image 17).

### Storage Recommendations

The small jewelry pieces should be stored in a divided tray placed inside an acid-free box. The trays can be purchased from any archival supply company. Gaylord has another option, a modular box system which is customizable to the sizes needed for the individual items (<http://www.gaylord.com/Preservation/Artifact-%26-Collectibles-Preservation/Boxes%2C-Trays-%26-Dividers/Storage-Boxes/Gaylord-Archival%26%23174%3B-E-flute-Board-Lid-Modular-Box-System/p/MOD-SYSTEM>). The customizable box system might be the better option for the



Image 17

Concha loop with green waxy corrosion and discoloration on leather belt

storage of the smaller jewelry items as it allows for storage of both the really small items and a few larger items, such as the semi-centennial medal and the leather case. Inside the tray compartments or the modular boxes, small amounts of polyester batting or tissue should be placed, to both cushion the items and keep them from moving within the compartment. The small boxes that currently contain the jewelry can be preserved, if desired, by placing them into another compartment in the divided tray. The concha belt should be stored in an acid-free box

large enough that it can lie flat. Prior to storing the belt, small pieces of Mylar should be placed between the leather belt and the concha loops and concha belts to protect the leather from further deterioration caused by the corrosion. Once protected, the belt can be wrapped in acid-free, unbuffered tissue and laid flat inside an acid-free box.

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## 5.8 Other Objects

There are a number of other objects with the collection that do not fit the above categories: two wooden canes; a tortoise shell music box; a paper hand fan; a wooden jewelry/treasure box with glass panels; a small cardboard box containing locks of Ima Hogg's hair from when she was a child; a stone paperweight belonging to James Stephen Hogg; and a cardboard and paper James Stephen Hogg advertising cigar box. There is also a typed inventory of a few of the Hogg Family Artifacts dating from the original donation. These items require a storage environment similar to other wood, paper or metal items, steady temperatures under 70 degrees and stable humidity levels between 30% and 50%. The objects also require protection from light and pollutants in the air.

### Current Status

Currently, most of the objects are wrapped in paper and stored in cardboard boxes. The two wooden canes are being stored in the anteroom on top of the library table, and the box of Miss Ima Hogg's hair is in the metal box with other smaller collection items. The majority of the items are in good condition, showing wear consistent with their age and use.

However, the tortoise shell music box has a large piece broken from the side of the box and the lid is no longer attached to the hinge (Image 18). The painted and carved cane from Mexico has a curve to it and is split at the apex of the curve (Image 19). The paperweight has a small chip and the paint is wearing off. The cardboard cigar box has wear to the paper and the lid is currently stuck down in the box (Image 21). The wooden jewelry/treasure box is locked with no



Image 18

Music box with broken pieces

key and shows signs of previous repairs (Image 20). The typed inventory of Hogg Family artifacts is in good condition, however it is discolored.

### Storage Recommendations

Most of the objects can be stored wrapped in unbuffered, acid-free tissue and placed inside an acid-free box. The wooden canes will need a box long enough so that they can lie flat



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inside and should be supported with tissue, especially the cane from Mexico, so that any further damage is mitigated and no more curving or cracking occurs. Consult a conservator if there are concerns about the cracking and curving of the cane from Mexico, or if further damage is noted at any time.

The music box is small enough that it might be best stored in a divided tray with other smaller items. Generally I would suggest that the music box not be stored inside its leather



Image 19

Crack in bend of carved and painted cane from Mexico

case, however as it is broken, it might be better if it remains in the case so that any small pieces that come off do not get lost. I would consult a conservator to determine if it is possible to repair the tortoise shell box. The box of hair should also be stored in a divided tray. I would however remove the hair from the red and green box and wrap it carefully in tissue before placing in the tray. The box can be stored inside a separate compartment if desired. The paperweight can be wrapped in tissue, however

as it is stone and very heavy, I would make sure that it is at the bottom of the box in which it is stored. As the paperweight is stone, it is relatively stable and as long as it is protected from damage by handling, it should remain in its current state.

The jewelry/treasure box is a composite item, meaning it is made of more than one material and is especially sensitive to changes in temperature and relative humidity, particularly in areas where there is a previous mend. It is also quite large and heavy. An item such as this would be best stored in a closed cabinet where it would be protected from light and pollutants. However as this is not a possibility at this time, I would place the box inside an acid-free box with tissue filling any gaps in between the jewelry/treasure box and the acid-free box so that no shifting of the jewelry/treasure box occurs. If there are concerns about

the previous mends, or a desire to have the box unlocked, I would consult a conservator who specializes in wooden objects.



Image 20

Possible previous repair on jewelry/treasure box

placed inside an acid-free box or closed cabinet. However, as this is not practical at this time, I would carefully wrap the fan in unbuffered acid-free tissue and place it on top of any other objects in an acid-free box.

The cigar box is in good condition, with some wear consistent with its age, with the exception of the lid which is stuck down into the box. If the archivist is comfortable doing so, I would try to lift the lid out of the box using a microspatula or other thin, flexible, but not sharp, object. Once the lid is out of the box, I would fill the box with acid-free tissue to prevent the lid from falling into box again in the future. Since this object is primarily paper it is very light weight and can easily be crushed by heavier objects. If the cigar box is stored in an acid-free box with any other items, I would make sure that it is on the top, however it does not necessarily need to be wrapped in tissue unless desired. The paper fan from Spain is an unusual item made from paper and wood and can be damaged easily if not carefully handled. Generally an item such as this would have a custom cradle created for it so that it can be stored partially open, before being



Image 21

Cardboard cigar box with lid stuck down in the box

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## 6. Conclusion

The Hogg Family Artifacts are a unique collection of objects owned by various members of the Hogg Family. As the stewards of the artifacts, the Hogg Foundation has a responsibility to preserve the items for the future. Given the differing nature of the items in an archive that primarily contains paper materials and books, it is obvious that the preservation and storage needs of the objects are slightly different. However, the environment that is best for the paper and book collections of the archives will be best for the storage of the Hogg Family Artifacts as well.

A written preservation plan and supporting documentation such as an emergency preparedness plan will help the stewards of the archive understand potential risks and set priorities for the preservation of the Hogg Family Artifacts. In addition, attention should be given to monitoring the environment inside the archive, particularly the relative humidity.

We have outlined below our recommendations for short and long-term goals.

### Short Term Goals: Within One Year

- Properly store deteriorating artifacts, such as textiles, to prevent further deterioration.
- Purchase dataloggers to continue monitoring temperature and relative humidity levels in archive.

### Long Term Goals: Within Three Years

- Properly store objects that are in stable condition to prevent future deterioration or damage.
- Create emergency plan.
- Create a preservation policy.
- Address any temperature and relative humidity fluctuations in archive.

The archivist of the Hogg Foundation is already aware of basic preservation practices that have kept the foundation collections in good condition. In addition, the archivist is open to storing the artifacts in more proper storage that will help maintain their current condition and consulting experts where necessary. This commitment and enthusiasm is promising for the future of the Hogg Family Artifact collection.

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