

Emergency Management Plan for the Museum of Anthropology, 2006

Purpose

This emergency management plan addresses emergency planning and preparation, disaster response and recovery. The plan covers the safety of people and collections management concerns in the event of disaster but also provides guidelines to prepare for eventualities the museum may encounter in a concise and easy to follow manner.

The emergencies MOA could face are of two disparate types. The first type is the emergencies with forewarning which MOA staff and volunteers can adequately prepare for before the disaster occurs. These emergencies include: natural disasters such as hurricanes, floods, and other severe weather events. The second level of emergencies happens with little or no warning and includes: fire, tornados, chemical disasters, earthquakes, terrorism, theft, medical emergency and vandalism.

The plan also sets forth collections priorities in case of an emergency. Collections have been prioritized according to rarity, research importance, and replacement potential. Collections will be listed by museum section and priority for ease of removal from MOA in an actual emergency. The hierarchy of collections will allow for some flexibility depending upon the level of an emergency and what areas of the museum are affected.

It is important for each staff member to understand their responsibilities and the museum's goals and responses in the event of an emergency. Generally, emergencies on a small scale will not affect the entire staff; however, some instances will force staff to work outside of their usual area and all members should have some familiarity with each other's roles and responsibilities. The plan will make staff familiar with emergency procedures both for people and objects, so that the entire team can effectively respond in an emergency.

An emergency plan is not a document etched in stone. The plan will be updated as necessary when new objects are acquired, when building plans change, or when personnel change. The plan is written to address the museum's needs as the institution and risks change. We as a staff cannot anticipate every possible risk the museum will face. We can try to minimize the effects of the emergencies we can anticipate and remain calm when we have no control.

Section I

Emergencies with Forewarning

Part One: Hurricanes

I. Early warning preparation – When the National Weather Service issues a *Hurricane Watch* indicating a warning period of 48 hours or more, the following steps should be taken.

A. Prepare the museum site.

1. All grounds around the museum will be cleared of loose debris which could cause damage if it becomes airborne.
2. Stack any loose construction materials on site together and cover with a tarp and stake down if appropriate.
3. Clear nearby drains of debris if possible or contact WFU facilities to complete the work.
4. Examine the building exterior for any improperly functioning doors or windows which could inhibit preparation.

B. Structure and staff preparation.

1. A visual inspection of emergency supplies will be conducted by the registrar and curator. Purchase and restock of missing or expired supplies will be addressed by the administrative assistant. Lists of supplies are in the appendix.
2. All security and fire systems will be tested by the staff. This includes electronic systems, fire extinguishers, walkie-talkies, cell phones and flashlights.
3. The director and administrative assistant will assure sufficient quantities of petty cash are available for emergency uses.
4. The registrar will identify padding and support materials necessary to protect the endangered collections in the museum and obtain them from offsite. (Furniture pads, blankets, bubble wrap, etc.). The registrar will also ensure breakable objects are moved to lower storage areas to reduce damage. Breakable objects offsite will be covered and padded to prevent damage.
5. Staff will fill all personal vehicle gas tanks to insure the museum has adequate transportation if necessary to move objects.
6. The administrative assistant will contact specified volunteers to determine who will be able to help during the recovery phase if a hurricane strikes.

II. Hurricane imminent preparation – When the National Weather Service issues a *Hurricane Warning* indicating the imminent threat of a hurricane to our area with 18 hours or less lead time the following should be undertaken.

A. Structure

1. Plywood, if available, will be affixed to vulnerable doors and windows. Any available staff can conduct this work. This does not include the curation room as its windows are bulletproof. However, the curation room windows need to be covered with plastic sheeting in case water leaks through the seals. The curation room windows are the responsibility of the registrar.
2. Sandbags will be obtained and placed at the front doors of the museum, the side doors (the Africa gallery and the Ed Room) and at the curation room door. Exterior doors will also be secured with plastic sheeting and duct tape. All objects on the floor or too low are at risk for water damage and need to be moved to a counter or placed on at least 6” ethafoam blocks. Sandbag placement can be done by any available staff; raising objects is the responsibility of the registrar and curator. Cabinet doors in the curation room will be secured to prevent object spillage.
3. Collection priorities need to be moved to a safe facility or out of the area if time permits. If time does not permit, the staff with object handling ability will move the objects to an interior space in the museum on a table and cover with blankets and plastic sheeting.
4. Exhibit cases that could fall and damage objects or cause injury will be emptied and objects placed in a secure location. Other cases can be moved together and clustered to prevent movement. Vitrines will be duct taped on bases and all lights should be unplugged. Cover all exhibits with blankets and furniture pads.
5. The administrative assistant will secure any necessary files or documents pertaining to the management of the museum. The registrar will ensure the safety of collections records, especially deed of gift information and the accession logs.
6. If time permits, library book cases will be covered with plastic in case a window breaks and water enters the building. Also, unplug all computers, printers and other electronic equipment not necessary to the control of the museum environment.

III. Immediately prior to the hurricane – These are the last minute preparations that should be addressed immediately prior to evacuating the site.

A. Staff notification to evacuate.

1. Director will release all staff to return home or go to the nearest shelter. Confirm all staff contact information such as cell phone numbers. Determine who will be the first staff members to return after the storm.

B. Final facilities check.

1. Check that all non-essential electrical equipment is turned off.

If the hurricane threat is severe enough to warrant it, computer equipment may need to be removed by staff.

2. Set the museum alarm and lock all doors. The administrative assistant will notify local fire and police response that the site will be unattended. Provide a means for safety officials to contact a lead staff member in case of damage to the building.

3. Evacuate the site as instructed by the director or by local authorities.
a. In the case of a minor hurricane, it may be prudent to keep a few staff members on site. In that event, pertinent staff will need to follow basic safety and security procedures as the needs arise.

IV. Recovery – Following the storm and as soon as practical, staff should report to work at their regularly scheduled times.

A. Recovery

1. Implementation of plans for recovery and the return to normal museum operations will be determined by the director. Recovery professionals and repair professionals, including WFU Facilities staff, will be contacted by the director concerning any structural damage to the facility.

2. The registrar and curator will implement collections recovery plans including: attending to collections damage, prioritizing conservation needs, contacting appropriate conservators and vendors and alternative storage spaces. See appendix for appropriate contacts. **SEE: AFTER THE DISASTER: COLLECTIONS.** . Document all damage with a digital camera with a time/date stamp.

3. The educator will assess any damage to the education room and notify the registrar of any museum objects damaged by the storm.

4. The administrative assistant will conduct the PR after the storm to notify the public about conditions as the need arises.

5. The store manager will conduct a survey of stock and account for any damage to shop merchandise.

B. Notes

1. It is anticipated that the staff will have personal concerns about their homes and families. The museum understands these concerns and will not unduly detain or endanger its employees or their families with unreasonable requests of service. Employees should still report to work as usual unless otherwise instructed by the director.

2. Following a damaging hurricane, employees may experience personal issues making their participation in recovery efforts difficult. The museum understands these situations but asks that staff return to work as soon as possible. Do not wait for phone notification to return to work once the storm has passed. Come to work on your next scheduled day at your normal time.

3. Should an evacuation be called for by authorities GO!!!! Once it has been deemed safe to return to the area by an official statement return to work as soon as possible.

Part Two: Severe Weather

I. Thunderstorms – The threats faced in thunderstorms are wind and lightning.

A. Wind response

1. Secure all loose materials on the museum grounds so they will not blow around.
2. In case of severe wind: go to a place of safety.
 - a. Visitors and school groups should remain at the museum until the storm passes.
 - b. Any employees outside should seek shelter inside.

B. Lightning response.

1. In severe thunderstorms, telephone usage should be limited to short calls.
2. If there is very strong and frequent lightning, employees may be instructed to turn off computers and printers.

C. Safety tips for thunderstorms

1. Avoid all downed power lines. Contact appropriate utility representatives to address downed lines.
2. Report any structural damage to the director as needed.
3. If the power is completely cut to the museum due to downed power lines, the collection should be monitored for dangerously fluctuating temperatures and relative humidity levels. This is the responsibility of the registrar.
4. Doors should be kept closed in collections areas to prevent temperature flux and to maintain a stable relative humidity level.

II. Floods – The museum is not located in a flood plain, but there is a history of flooding in the back parking lot and flooding due to plumbing failure.

A. Parking lot flooding

1. If safe, remove personal vehicles from lot.
2. The back doors at the Anthropology department may need to be sandbagged to prevent backup water from entering the lower floor where the curation room is located.
3. Clean storm drains are the best way to prevent flooding. Report any clogged storm drains to WFU Facilities as soon as discovered.

B. Building flooding

1. Collections are most at risk due to interior plumbing failures. Watch for problems with toilets and water fountains.
2. If a bad odor or excess water appears in a restroom, notify WFU Facilities immediately to schedule an emergency repair. These are signs of a deeper problem such as sewage backup.
3. All objects too close to the floor of the curation room should be raised in case the downstairs toilet overflows or has a sewage backup.
4. Sandbags will be placed at the curation room door at the first signs of flooding.

III. Severe winter weather – The museum is in an area where ice storms are common. Sleet and freezing rain can create many problems for museum collections and staff.

A. Power Outage

1. If the power is completely cut to the museum due to downed power lines, the collections should be monitored for dangerously low temperatures and relative humidity levels. This is the responsibility of the registrar.
2. Doors should be kept closed in collections areas to prevent heat loss and to maintain a stable relative humidity level.

B. Severe winter weather response

1. Often severe weather occurs while employees are at work. Staff should monitor weather reports via an online source or the radio. Staff can also consult WIN about potentially dangerous winter weather.
2. If at home, staff should consult WIN or the emergency number for WFU to determine if the campus is closed.
3. If the campus is closed, staff need not attend work until the weather event passes. This includes student workers who commute or live on campus.
4. Once staff can return to work the following safety measures should be followed:
 - a. Insure ice melting salt or another substance covers the exterior public access areas to the museum. Also watch for any dangerous puddles of water in which someone could slip and fall.
 - b. WFU facilities should have cleared the lot of any dangerous ice or snow. If they have failed to do so, call facilities to complete the work.
 - c. Also notify Facilities of any falling limbs or trees due to potential roof damage.

IV. Tornadoes - We are located in a region in which tornadoes are commonly associated with severe thunderstorms.

A. If the Weather Service has issued a *Tornado Watch* staff should be vigilant of the conditions that are associated with a tornado.

1. Staff should be aware of the building's safe area in the stairwell in case of a tornado and insure emergency supplies are located there.
2. Limit use of electronic equipment including phones, computers, printers, fax machines, and other electronic equipment.
3. Monitor locations of visitors and staff. Notify them of the weather alert and make sure they know procedures to follow in case of a tornado.
4. Secure doors and windows.
5. Move collections away from windows and doors. Cover with padding, acid free board, and heavy plastic sheeting if time permits.

B. If the Weather Service issues a *Tornado Warning* staff and visitors should prepare for a tornado.

1. Evacuate all staff and visitors to the museum's tornado safety area. The stairwell or the anthropology department hallway are the safest places in the building. The administrative assistant should bring the weather radio/flash light located behind the copier upstairs.
2. Restrict telephone use to emergencies.
3. Remain in the safety area until the radio reports the warning is over.

C. Recovery after a tornado.

1. The staff should inspect for damage and the director should contact any necessary help to repair the facility.
2. The registrar and curator will inventory the collections for storm damage and assess any conservation and repair needs. **SEE: AFTER THE DISASTER: COLLECTIONS.**
3. The educator will insure all students visiting are accounted for and safe if a class was taking place during the tornado.

Section II

Emergencies without Forewarning

Part One: Fires

Introduction – Fire is a dangerous emergency for any museum. All employees should be vigilant for the possibility of circumstances that could result in a fire. To help eliminate the potential for fire, below are some guidelines to follow.

I. Rules

- A. Smoking is prohibited in ALL museum facilities. This rule applies to employees, contractors, students, volunteers and anyone in the museum. No candles or incense should be burned in the museum at any time.
- B. All flammable liquids should be stored in the chemicals safe in the dark room and inventoried annually. Use of such chemicals should be outside if possible or away from collections areas.
- C. If open flame is needed to repair the building, such as welding material, the workers should be closely monitored.
- D. Because fire prevention is the responsibility of all employees, please become familiar with the rules and the following procedures.
- E. Maintain clear evacuation routs and follow safe procedures for storage of materials per fire marshal's instructions.

II. Procedures

A. Detection

- 1. Fires reported by alarm
 - a. The alarm will notify the fire department automatically; a staff member may also call the fire department or 911 if necessary.
 - b. Staff and visitors should exit the museum to the predetermined meeting site in the grass next to the museum across the road and a head count should be done to account for all visitors and staff. **See regulations, staff log in/out.** Keep a staff member at all times with visitors during an evacuation.
- 2. Fires detected by staff
 - a. If you are alone and detect a fire get help. Do not attempt to fight the fire alone.
 - b. Only attempt to put the fire out by extinguisher if you have been trained and have another staff member notify others of the fire. Do not block yourself in a room with a fire. Do not allow the flames to block the exit.
 - c. If the fire cannot be controlled by an extinguisher, implement evacuation measures to get staff and visitors out of the museum. Call the fire department or 911.
 - d. Account for all visitors and staff. Keep a staff member with visitors at all times during the evacuation

e. Make keys and facility maps available to the fire department.

III. Recovery

A. Re-enter the building only when fire officials deem it safe.

B. The registrar and curator will evaluate the collections damaged by fire, smoke and water. The collections will be prioritized for conservation and repair. Appropriate conservators and vendors need to be contacted. SEE: **AFTER THE DISASTER: COLLECTIONS.**

C. Any objects needing conservation, or beyond repair or conservation need to be reported to the museum's insurance representative.

D. Clean any water remaining from extinguishing the fire. Use mops, shop vacs (away from collections), absorbent paper, and towels.

E. Remember some objects may be damaged although no external damage is apparent. Rapid changes in temperature and humidity can cause internal damage and structural weakness in objects. Be careful handling objects and avoid any unnecessary movement.

Part Two: Earthquakes

Introduction – Earthquakes, although not common in our region, do occur. Our museum is located near the New Madrid Fault. According to the USGS website, the largest force our museum would ever experience from an earthquake is a level VI. This strength earthquake could cause substantial damage to ceramics, glass objects and minor cracking in walls. Despite the small chance of an earthquake actually occurring, we still will safeguard the collections on the off chance that an earthquake would occur.

I. Preparation

- A. Collections will be reorganized to place very fragile or breakable items on lower shelves and in low cabinets. The likelihood of fragile items breaking from a fall decreases dramatically when objects are lowered.
- B. Cabinets will be able to lock shut and click shut. Plastic safety clips can also be placed on cabinet handles to prevent doors from opening during an earthquake. Drawers and shelves will be adequately padded to prevent objects from rolling.
- C. Identify safe zones for staff and visitors in case an earthquake occurs.

II. During an earthquake

- A. Make sure all people are safe.
 - 1. Move staff and visitors away from windows, mirrors, glass cases, bookshelves, and electrical equipment. Watch for falling debris.
 - 2. Move people to inside walls away from windows. Have people stand in interior doorways, crouch under desks, tables or other sturdy furniture, or have them brace themselves in an interior corner of the building. Lock wheelchair wheels.
 - 3. If you are outside, alone or with a group, move into an open area away from buildings, trees, walls, chimneys, and power lines.

III. Immediately after an earthquake

- A. Assess the situation
 - 1. Prepare for potential aftershocks.
 - 2. Attend to staff, volunteer, and visitor injuries.
 - 3. Prevent and/or extinguish fires.
 - a. Do not allow open flames.
 - b. Put out small fires, if possible. Call the fire department if necessary.
 - 4. Evacuate mobile visitors to open areas away from power lines and other buildings as soon as possible after the initial shaking.
 - 5. If the earthquake happens after business hours, determine who should be the first to enter the museum.
- B. Once the situation has stabilized

1. The staff member in charge should assess the building for any dangerous damage.
2. If it is safe, re-enter the building.
 - a. Each employee will evaluate their own areas for damage. The curator and registrar will assess the collections, both on exhibit and in storage. The educator will notify the registrar of any damaged objects. Photograph everything as is.
 - b. The registrar and curator will identify objects in need of repair and conservation. SEE: **AFTER THE DISASTER: COLLECTIONS.**
 - c. Applicable conservators will be contacted.
 - d. The director will notify WFU Facilities Management of any structural damage to the building to be repaired.

AFTER THE DISASTER: COLLECTIONS

After the disaster specific steps must be taken to insure the safety of the collections. Below are listed steps for dealing with water damage, mold, mud, ink or dye transfer from water, corrosion, soot and ash, broken objects, and pests and animals. This guide is by no means comprehensive, but it a good starting point for collections recovery.

Water Damage

A. Ceramics

1. Prioritize ceramics from low fire to high fire to porcelain to glass.
2. Objects need to be multi-bin rinsed in progressively cleaner water until all debris is removed from object.

B. Photographs and Paper

1. These objects can be rinsed with a rinse bottle or a very low pressure hose.
2. Objects need to be placed on plex for support and held at an angle to a bin.
3. Rinse until debris is satisfactorily removed.
4. Books need to be rinsed with covers tightly closed. Just rinse the outside, further damage can occur if you open the book.
5. To dry books after rinsing stand them up and spread the pages. Circulate the air around the book without applying direct air. The pages can also be dried by interleaving paper towels every 25 pages to absorb the water.
6. Photos can be dried by hanging on a line or laying flat with the printed side up. Do not blot or rub photos!!

C. Prevent Corrosion

1. Metal objects can be rinsed in the multi-bin manner until clean. Removing the debris will help prevent unseen corrosion risks. Allow the objects to air dry with plenty of circulating air.

D. Notes

1. Objects can be frozen if you need to delay cleaning. The objects will still need to be dried out but it can ease prioritization.

Mold

A. Important considerations

1. Beware of allergic reactions to mold. Some employees may have severe reactions to mold if exposed – be careful!
2. Wear long sleeves, long pants, and a hard hat if entering a damaged building, safety glasses, gloves and a face mask or respirator.

B. Identify active and dormant mold. Active mold is fuzzy and has a wet appearance. Dormant mold is dry and powdery.

1. Before removing any objects determine how large the problem is. Should we get an expert?
2. Isolate all objects and seal off the area if it is a large problem.
3. Moldy objects can be placed in a paper box or wrapped in paper. Do not wrap objects with active mold in plastic.

C. Dry and clean the objects to make the mold dormant

1. If the objects are to be dried inside it can be accomplished by lowering the building or room humidity to 45 RH or below. This will make the spores dormant. Also use fans to circulate the air and a dehumidifier.
2. If the weather permits you can treat mold outside. Be careful to not apply too much sunlight to objects as fading can occur.
3. Freezing objects will also stop active mold growth.
 - a. Wrap objects in freezer paper before placing in the freezer.
4. Dry mold out and make sure it is dry! Clean the mold up by vacuuming with a hepa-vac. Objects with loose pieces need to be vacuumed with a screen or a filter between the object and the hepa-vac.
 - a. Vacuum slowly and follow with a curation brush
 - b. Brush away from yourself and vacuum up the loose mold
5. If a surface is hard, such as wood, and vacuum does not do the job, you can wipe the surface with a soft cloth to remove the mold.

D. A major water and mold disaster

1. Check the actual structure for signs of mold such as under carpets, in cabinets or in the basement.
2. Make sure the museum environment is mold free before returning cleaned objects.

Mud

A. Important considerations

1. Wear sturdy, skid free shoes – mud is slick and you may fall.
2. Walk slowly and carefully.
3. Wear long sleeves, long pants, a hard hat if necessary, rubber or leather gloves, a dust mask, safety glasses, a protective apron, and sturdy shoes or boots.

B. Where did the mud come from?

1. Determine what may be in the mud
 - a. Carolina clay will probably stain
 - b. The mud may also have sewage in it
2. Be careful of contaminants but also be aware that mud can hide broken and sharp objects – the sturdy gloves and shoes will protect you.

C. Deal with the wet mud

1. Use tweezers or spatulas to probe the mud for objects. Do not just dive in with your hands to find objects.
2. Wet mud is a priority. Dry mud is stable and can be dealt with at a later time.
3. Objects with wet mud need to be rinsed before the mud hardens or it will trap water in the object and create a mold problem.
 - a. Objects can be rinsed only if stable. Otherwise just try to remove as much mud as possible.
4. Wood, ceramics and metal can be rinsed using the multi-bin method with progressively cleaner water.
 - a. Change the water often to avoid a build up of debris.
5. Paper objects can be rinsed on plex for stability. Objects can be dipped into a bin at an angle or rinsed with a low pressure hose.
 - a. Dry by hanging or laying flat on an absorbent surface with the printed side up if a photo.
6. Do not rinse or wash very fragile or severely mold damaged objects – leave those items for a conservator.

D. Deal with the dry mud

1. Once objects are dry or if mud is found dried on objects you can remove remaining dirt with the following methods:
 - a. Use an air bulb to blow off dried mud on textiles or paper
 - b. Other objects can be cleaned with a curation brush. Be sure to brush gently – do not force the mud off the object.
 - c. A hepa-vac can also be used to remove loose dirt but examine the object to make sure it is stable enough to be vacuumed. Do not vacuum if you may suck up part of the object.
 - d. Gently use a curation brush to ease dirt off the object surface as follow you the brush with the vacuum.

E. Mud reminder

1. Take your time, be careful and use an easy hand. Don't rush the process.

Ink and Dye Transfer due to Water

A. Important considerations

1. Wear protective clothing, gloves, an apron and eye protection.

B. Prioritize

1. Get wet paper and textiles dry and stable as quickly as possible.
2. To prevent dye transfers from getting worse do not move any object which is clearly bleeding ink or dye until you have stabilized the situation.

C. Clean

1. Blot the water away from any object whose dye is bleeding – do not move the object
2. Objects in the process of transferring dye need special care
 - a. Use light colored blotting materials to pull up water from the objects – you will probably need LOTS of blotting material. The light color will show the color transfer and help determine when you have cleaned enough.
3. If you absolutely must move dye transferring objects handle carefully!!!!
 - a. If the objects are wet they will be much heavier and fragile than usual
 - b. Use boxes, carrying trays or carts to support the objects.
4. Separate loose paper and unrolled textiles from each other using clean white towels. This will prevent inter-object dye transfer.

D. Dry

1. After removing excess moisture move on to object drying.
 - a. Air drying is an effective means to dry objects
 - b. Dry the objects before mold sets in but if you cannot get to objects they can be frozen until you can address their needs.
 - c. Note: You will need a large amount of space to lay everything out to dry effectively.
2. Books
 - a. Do not rub or blot materials with soluble inks; dry these by interleaving clean, white paper towels. Work slowly and carefully to not smudge the ink.
3. Textiles
 - a. Do not twist or wring objects!!!!
 - b. Press the water out of the object with a flattened hand and a clean sponge while the object is spread out as flat as it can be.
 - c. Block and shape textiles back to their original form
4. Metal
 - a. Check for metal on objects. Wet metal can stain textiles.
 - b. Guard textiles from attached metals with Mylar or plastic bags.
 - c. Cut a square slightly larger than the metal objects and cut a slit in the square.
 - d. Place the square over the object and between the metal and the textile to form a barrier.

E. Notes

1. Avoid stacking wet textiles.

2. If in doubt – consult a conservator!
3. If you freeze wet books or paper use waxed paper between sheets to prevent ink transfer.
4. If you freeze wet textiles, use waxed paper to interleave between the objects and pack them flat if possible.

Corrosion

A. Important considerations

1. Corrosion affects metal after any water emergency or it can happen during an event of high RH.
2. Generally, corrosion is orange to red-brown in color. It may also be white, green, grey or brownish-black.
3. Wear rugged clothes and gloves. Also wear safety glasses.
4. Be wary of objects with a high lead content. Wear a respirator for lead objects.
 - a. Identifying lead corrosion is easy. Corroded lead is white and is hazardous to your health. Always wear gloves and a mask when dealing with corroded lead.

B. Dry those objects!

1. Get objects dry as soon as possible and prevent them from staining nearby objects
2. Isolate all wet metal pieces and if possible move from damp or humid areas
3. If you see signs or corrosion identify iron items first. Iron objects react most severely to being wet.
 - a. A magnet will be attracted to iron pieces.
4. Use towels to blot excess moisture off objects
5. Place objects in an area with good air circulation – look for an area with lots of space.
6. Metals can also be placed in direct sunlight to dry
7. Place objects on an absorbent material to dry and turn objects over at least once during the drying process
8. Metal objects can also be dried with a hair dryer - great for drying the interior of metal objects.
 - a. Use hairdryers only on objects that are all metal, not composite. Use only a low or no heat setting.
9. Be sure not to leave any water in objects.
10. Metal objects with a finish require special care when wet
 - a. Do not rinse!
 - b. If you must rinse, be careful not to knock paint or finish off the object
 - c. Do not use a hairdryer to dry!
11. Composite objects with metal are also susceptible to corrosion
 - a. Dry the metal parts and isolate them with a plastic or Mylar barrier.
12. **DO NOT USE** typical metal cleaning or corrosion removing products! Many contain ammonia and cause further corrosion.

C. Notes

1. Keep metal objects in a low RH environment below 55% RH.
2. Stabilize the situation but do not treat the corrosion yourself – consult a conservator.

Soot and Ash

A. Important considerations

1. You will get VERY dirty
2. The sooner you can remove the soot and ash the better
3. Wear a long sleeve shirt, long pants, a hard hat if necessary, sturdy shoes, safety goggles and a mask
4. The soot will be abrasive and sticky
5. Ash will be less greasy than soot but much more abrasive
6. If the soot or ash is wet DO NOTHING TO TREAT!! Seek help from a conservator.

B. Removing dry soot or ash

1. You will need two essential tools
 - a. A vacuum cleaner (should be hepa)
 - b. Soot sponges which can be purchased at any hardware store
2. When vacuuming, leave the object in place if possible to avoid spreading ash around
3. If you must handle the object, grasp it in a place that will not show smudges and then vacuum carefully.
4. Be careful to keep the vacuum nozzle above the object surface – do not let the nozzle touch the object.
5. Do not use a brush!!!! It will just smear ash and soot, abrading the object and make matters worse.
6. When vacuuming textiles leave them in place - do not unfold them before vacuuming.
 - a. Unfolding or unrolling a textile covered with soot will just spread the soot to unexposed areas.
7. Begin vacuuming at the edge of textiles and then carefully work into the crevasses and folds.
 - a. It may take two people to complete the task – one to position the object and one to vacuum.
8. The textile approach applies to all other objects as well.
9. Replace vacuum bags often and wash the attachments frequently.
10. Once finished, dispose of bags, gloves and any sooty material.
11. In some cases you may need an extra step – particularly greasy soot may not vacuum up.
 - a. Soot sponge the objects - do not wipe, blot!
 - b. Once a sponge surface is covered with soot, cut that layer off or turn sponge to a clean surface and repeat the process.
12. For all steps take your time and work methodically!

Broken Objects beyond Our Skills

A. Important considerations

1. You will need latex or rubber gloves, freezer bags, a curation brush, cardboard boxes, paper towels, packing materials, a clean place to work, a camera, and a pencil and paper

B. Cracked objects

1. Handle cracked objects carefully, they can lead to breaks.
2. Keep area around the crack free of moisture and dirt.

C. Broken objects

1. If you encounter broken objects be sure to get all of the pieces
2. Photograph the object before you pick up any pieces
 - a. The photographic information will help the conservator to properly treat the object
3. If you do not have a camera, make a sketch with pencil and paper
4. After documenting, gather all pieces together wearing dry, protective gloves.
 - a. Be sure not to get cut from rough, sharp edges.
5. Wrap pieces in clean material apart from each other. Try to find the object number and put that number with all the other pieces written on the outside of the wrapping.
6. All wrapped pieces can go in a plastic bag or a cardboard box together.
7. Once all of the pieces are wrapped, packed and labeled, they can be sent with the photographs to a conservator for repair.

D. Moldy broken objects

1. Wet or moldy objects should not be placed in a plastic bag. Separate wet or moldy pieces and store in a cardboard box.

Pests and Animals

A. Important considerations

1. If you encounter ANY wildlife use caution!! The animal may be hurt, confused or rabid and may harm you.
2. Do not corner an animal in the museum.
3. Call someone from animal control immediately if you see a live animal in the museum. Animal Control: 767-6293.

Appendix A

Emergency Numbers

POLICE - WFU

Wake Forest Police (from campus phone)
911

Wake Forest Police (from off campus phone)
336-758-5911

Non-emergency calls (from campus phone)
311

Non-emergency calls (from off campus phone)
336-758-5591

Emergency number in case of power failure – EMERGENCY ONLY
x0443

POLICE – LOCAL

Winston-Salem and Forsyth County Police Communications
336-773-7700

Forsyth County Sheriff
336-748-4100

WFU FACILITIES

Night Emergency/Maintenance
x4255

Facilities Director
x4626

Operations and Maintenance
x4001

Director of Environmental Health and Safety
x5385

Safety Director
x4329

Assistant Director of Safety
x4224

FIRE

Fire Department
336-773-7900

Fire Station 8
336-727-2454

Forsyth County Fire Department
336-727-8084

MEDICAL

Carolinas Poison Center
1-800-848-6946

Forsyth Medical Center
336-718-5000

Wake Forest Health Services
336-758-5218

Wake Forest Baptist Medical Center
336-716-2011

Appendix B

Insurance Information

Julie Groves, Trust and Insurance Analyst
On Campus – x4197
Home – 336-714-6006

Alex Whaling, Insurance Company Representative, Aon Insurance Company
336-728-3021

Appendix C

Emergency Clean Up Agencies

AfterDisaster: The Water and Fire Emergency Team
1130 W. Vandalia Rd.
Greensboro, NC 27406
PO Box 10393
Greensboro, NC 27404
888-517-8676
www.afterdisaster.com

Disaster One
3012 Patterson Street
Greensboro, NC 27407
336-292-3398
336-294-7974 fax
336-382-8936 cell
rwatson@disasterone.com
www.disasterone.com

Luebke Renovations
1416 Boston Rd.
Greensboro, NC
336-299-2516

Accent Water Damage Restoration
104 Northgate Park Drive
Winston-Salem, NC
336-759-9090

L & P Chem-Dry
212 Pennsylvania Ave.
Winston-Salem, NC 27104
336-774-1525

Appendix D

Conservators and Object Services

Ceramics

Lawrence Bradshaw
Bradshaw & Whelan Ceramic Reference Books
PO Box 18521
Asheville, NC 28814
828-253-1829
Ceramics5@charter.net

Costumes, Textiles

Patricia Ewer
Office -612-870-3067
Home – 612-870-3118

Ethnographic and archaeological objects, outdoor sculpture

Ronald Harvey
Tuckerbrook Conservation
2498 Belfast Rd
Lincolntonville, ME 04849
207-763-3973 work
207-763-3976 home
207-446-2390 cell
rsharvey@tidewater.net

Ethnographic and 3-D objects, sculpture

Shelly Reisman Paine
2407 Sunset Place
Nashville, TN 37212
615-269-4247 work
615-269-7328 fax
615-400-4032 cell
srpaine@nashville.net

Furniture, gilded objects

Nancy Rosebrock
Biltmore Estate
One North Pack Square
Asheville, NC 28801
828-225-6203
ncrosebrock@biltmore.com

General Objects

Laurie Booth
Midwest Conservation Services
10160 Queens Way
Unit 4
Chagrin Falls, OH 44023
440-543-2202
mwestern@alltel.net

Andy Compton
Compton Studios
8215 McArthur Park Dr.
Efland, NC 27243
919-304-5002
919-619-4301 cell

Renee Jolly
Biltmore Estate
One North Pack Square
Asheville, NC 28801
828-225-6356
rjolly@biltmore.com

Alex Klingelhofer
Museum of Arts and Sciences
4182 Forsyth Rd.
Macon, GA 31210
478-477-3232
aklingelhofer@masmacon.org

Barbara Moore
2 Lancoma Lane
Pittsford, NY 14534
716-381-6134
barbaramoore@aol.com

Eva Sander-Conwell
1112 Crown Point Rd
Signal Mountain, TN 37377
423-886-6054
econwell@earthlink.net

Kate Singley
1083 Oakdale Rd NE
Atlanta, GA 30307
404-373-0995
singley@mindspring.com

Spencer Waldron
NC Museum of History
4650 Mail Service Center
Raleigh, NC 27699-4650
919-807-7883
Spence.waldron@ncmail.net

Paintings

Jeronimo Perez
Fine Arts Conservancy Stoneledge
5840 Corporate Way
West Palm Beach, FL 33407
561-684-6133
jpr@art-conservation.org

James Swope
James Swope Fine Arts Conservation
1701 South Olive Ave.
West Palm Beach, FL 33401
561-833-2862
jsfac@aol.com

Paintings and art

Perry Hurt
NC Museum of Art
Street: 2110 Blue Ridge Rd.
Raleigh, NC 27607-6494
Mail: 4630 Mail Services Center
Raleigh, NC 27699-4630
919-839-6262 or 919-664-6813 or 919-664-6797
phurt@ncmail.dcr.state.nc.us

Painting, painted architectural surfaces, polychrome artifacts

David Goist
Goist Art Conservation
3201 Churchill Rd
Raleigh, NC 27607
919-783-0252
gocon@aol.com

Paper

Jane Sugarman
602 S Elm St. #5
Greensboro, NC 27401
336-273-1355

M.J. Davis
Town Hwy. 17
Newark, VT 05871
802-487-8602
washimj@aol.com

Laura Goodman
Cobalt Design Group
531 Rose Lane St.
Studio 730
Marietta, GA 30060
678-571-3648
laura@cobaltdsn.com

Lenora Weaver
6 Wimberly Ct.
Decatur, GA 30030
404-371-8197
brobury@hotmail.com

Books and Paper

Sharon Bennett
360 Meeting Street
Charleston, SC 29403
843-722-2996, ext. 243 work
843-607-2111 cell
Ksbl1953@aol.com

Emily Marie Ferrara
Special Collections
College of Charleston Library
66 George St.
Charleston, SC 29424-0001
843-953-7331 work – direct
843-953-8016 work – office
843-722-2505 home
843-568-5306 cell
ferrarae@cofc.edu

Elizabeth Schulte
1786 Nancy Creek Bluff NW
Atlanta, GA 30327
404-350-8346
ekschulte@bellsouth.net

Paper and Paintings

Ginny Newell
715 Woodrow St.
Columbia, SC 29205
803-254-1640
conservation@msn.com

Paper, photos and books

Etherington Conservation Services
Don Etherington and Michael Lee
7609 Business Park Dr.
Greensboro, NC 27409
877-391-1317 or 336-665-1317
336-665-1319 fax
ecc@donetherington.com

Susan Nash
PO Box 1011
Shepherdstown, WV 25443
304-876-3772

Silver, Metal

Alfred Crabtree, Jr.
758 St. Andrews Blvd.
Charleston, SC 29407
restore@silvertvaultcharleston.com

Textiles

Muffie Austin
325 South 6th St.
Fernandina Beach, FL 32034
904-491-3871
texconserv@msn.com

Anne Peranteau
NC Museum of History
4650 Mail Service Center
Raleigh, NC 27669-4650
919-807-7860
anne.peranteau@ncmail.net

Upholstery

Anne Batrim
Biltmore Estate
One North Pack Square
Asheville, NC 28801
828-225-6204
abatrim@biltmore.com

Wooden Artifacts

Todd Jorgensen
1070 Gunsmoke Rd.
Tobaccoville, NC 27050
336-983-0762
todd@toddjorgensen.com

RESTORATION

Carl Kessler
Kessler Construction & Restoration
1030 Westmont Drive
Asheboro, NC 27205
336-302-2660
ckessler@triad.rr.com

Si Rothrock
Reidsville Building and Restoration
715 Way St.
Reidsville, NC 27320
336-349-1883

First Aid Restoration
Doug Watkins
5 Dundas Circle
Greensboro, NC 27407
336-834-0799

Wood Restoration

Martin O'Brien
Martin O'Brien Cabinet Maker
606 N. Trade St.
Winston-Salem, NC 27101
336-773-1334
martin@martinobriencabinetmaker.com

Storage and Environmental Improvement

Wendy Jessup and Associates, Inc.
933 n. Kenmore St., Ste. 323
Arlington, VA 22201
703-522-2801 work
703-522-2802 fax
wendy@collectioncare.com

Health and Safety

Arts, Crafts & Theater Safety
181 Thompson St, #23
New York, NY 10012-2586
ACTSNY@cs.com

Art Handlers

ARTEX Fine Arts Services – packing, installation, shipping and storage
8712 Jericho City Drive
Landover, MD 20785-4761
301-305-5500
www.artexfas.com

Charlotte Van & Storage Company, Inc.
PO Box 36817
Charlotte, NC 28236
704-525-4660 or 800-438-5734
fwatson@charvan.com

ELY, Inc. – packing, installation and storage
4110 Forestville Rd.
Forestville, MD
301-669-9100
www.elyinc.com

SurroundArt – packing and installation
2914 V Street NE
Suite 102
Washington, DC 20018
800-957-6639
moreinfo@surroundart.com

U.S. Art Company – packing, shipping, and storage
66 Pacella Park Drive
Randolph, MA 02368
800-872-7826
www.usart.com

CLIMATE CONTROLLED TRAILER RENTAL

PLM Trailer Leasing
2520 Starita Rd.
Charlotte, NC 28269
704-494-0950

WEBSITES

American Institute for Conservation of Historic and Artistic Works
<http://aic.stanford.edu>

Art-Care
www.art-care.com

The Association for Preservation Technology International
www.apti.com

Canadian Conservation Institute Publications
(CCI Newsletter, Notes and Conservation Information Database)
www.cci-icc.gc.ca/bookstore/index-e.cfm

Canadian Heritage Preservation
(How to care for)
www.preservation.gc.ca/howto/grid_e.asp

The Conservation Center for Art and Historic Artifacts
www.ccaha.org

Conservation Online
<http://palimpsest.sanford.edu>

Heritage Preservation
The National Institute for Conservation
www.heritagepreservation.org

Heritage Health Index 2005
www.heritagehealthindex.org

Before and After Disasters: Federal Funding for Cultural Institutions Guide
www.heritagepreservation.org/PDFS/Disaster.pdf

Image Permanence Institute
(Climate Notebook Workbook)
www.imagepermanenceinstitute.org/sub_pages/CNBworkbook.pdf

Museum of Fine Arts
(CAMEO: Conservation and Art Material Encyclopedia Online)
www.mfa.org/_cameo/frontend/

National Park Service Publications
(Conserv-O-Gram and Museum Handbook)
www.cr.nps.gov/museum/publications
(TPS Preservation Tech Notes)
www.cr.nps.gov/hps/tps/technotes/tnhome.htm

The North Carolina Arts Council, Conservation Resources

http://ncarts.org/freeform_scrn_template.cfm?ffscrn_id=166&

Northeast Document Conservation Center
(Preservation publications and workshops)
www.nedcc.org

Northern States Conservation Center
(Collections care training and materials)
www.collectionscare.org/ci/ci.html

Washington Conservation Guild
<http://palimpsest.stanford.edu/weg/intro.html>

Western Association for Arts Conservation
<http://palimpsest.stanford.edu/waac/>

Appendix E

Disaster Storage Space

University Corporate Center
Storage room to left of the auditorium

Contacts:

Customer Service 758-4255 to get access during non-business hours

Patty Hull 759-1120 Real Estate office-main contact

Warehouse located at 100 Reagent Drive, off of South Stratford, past Hanes Mall,
towards Clemmons

Split with Baptist Hospital, 10,500 sq. ft. on Med School side. Available space will vary
month to month. Heated in the winter but no air conditioning in the summer.

Contacts:

Tim Bell 716-4766 Med School Financial

Karen Huey 716-7691 Facilities Planning Capital Projects

Tanya Lewis 716-0458 tlewis@wfubmc.edu <<mailto:tlewis@wfubmc.edu>> Facilities
Planning Purchasing - oversees warehouse from main office (MAIN CONTACT)

Will Shelley - Based at warehouse

