



Conserve O Gram

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Safe Techniques For Archival Surveying And Assessment

Archivists survey inactive records and archival collections in parks and other institutions to help manage their documentary evidence and knowledge. The archivist joins a team of staff, who review all documentation throughout the institution. The team identifies collections of continuing value and recommends materials for disposition and deaccessioning. In a report, the team describes each collection; summarizes legal and preservation risks; and identifies and prioritizes procedural, space, and resource needs to effectively manage the collections to be kept.

The survey process poses health and safety risks to all active team members. Climbing and lifting can lead to bruises, broken limbs, concussion, cuts, falls, or strained muscles. Dust and mold can trigger allergic reactions or disease, such as hantavirus. Asbestos fibers, biological and chemical residues, radon, and waste can lead to life-threatening disease. Exposures to potentially hazardous materials must be minimized, monitored, and documented. Before working with hazardous materials, workers must be fitted with appropriate protective equipment and trained in its use. Job safety analyses (JSA) may be required. This *Conserve O Gram* summarizes some health and safety equipment, handling, and training issues to consider when conducting an archival survey or when working with any kind of collection housed in inadequate storage.

Create a Survey Tool Kit Including:

- small powerful flashlight (with extra bulb)
- environmental monitoring equipment
- sturdy clipboard with document pocket
- compact measuring tape
- packaged antibacterial moist paper towels
- canteen of water for drinking and washing
- antibacterial hand soap/decontamination kit (Note: won't kill all viruses)
- adhesive bandages, iodine, and bug repellent
- cellulose acetate test strips
- small scissors and hemostat for nitrate testing
- 2 pair of nitrile gloves
- respirator with cartridges for the contaminants you may encounter (Note: respirators must be fit-tested and cannot be used unless you have a medical evaluation.)
- washable long-sleeved smock and pants and/or a disposable Tyvek suit
- back brace for heavy lifting
- warm washable jacket (if spaces are cold)
- sensible washable shoes or Tyvek booties
- goggles or glasses (Don't wear contacts.)
- scarf, hat, and/or hard hat (to protect you from dust, hypothermia, and/or concussion)
- survey forms and pencils
- pocket calculator and a counting conversion table listing number of items per linear foot
- cell phone or two-way radio

Know When to Stop. Watch for hazardous conditions or materials. If you discover or suspect them:

- **Stop surveying immediately** and leave the affected space.
- **Document** your exposure.
- **Report the problem** to staff.
- **Return only when the space/materials are judged safe** by a hazardous materials expert and when you have appropriate protective and monitoring equipment and training.

- **Work with any safety officer** and trained staff to move material to a safe work space if hazardous materials cannot be controlled.

Time Your Survey Carefully. Work when:

- building temperatures are not too hot or cold to avoid hypothermia or heat exhaustion (Follow OSHA guidelines for work at high/low temperatures.)
- staff are available to work with you
- disaster-damaged spaces have been checked by authorities and are safe to re-enter

Gather Background Information. For example, if working at a park collect:

- clearly labeled maps of all park areas and building plans of all structures
- copy of the administrative history
- Collections Management Plans (CMP)
- Archival Assessments (AA)
- Resource Management Plans (RMP)
- Collection Condition Surveys (CCS)
- information from the park Website and the park profile at <<http://www.nps.gov>>
- a park phone directory
- park records management plan/procedures

Brief Staff. Explain to all non-survey team staff:

- who you are and what you are doing
- where and when you will be surveying
- why and when you may have to ask for staff help in identifying unmarked records
- why you will be propping doors open to keep air flowing and avoid being trapped
- how surveying records now will help secure the institutional documentation that covers their activities and contributions for future study

Never work alone in remote spaces. Be sure staff are aware of your location and can contact you at all times. Carry a cell phone or two-way radio.

Ask Questions. Ask staff to help you identify hazards to be avoided for your team's safety (and recorded on your survey report), including:

- buildings damaged by emergencies (floods, fires, earthquakes, etc.)
- records in damaged buildings with structural or floor loading problems
- records in spaces with friable asbestos or lead paint (See *Conserve O Gram 2/11*, Health and Safety Risks of Asbestos.)
- records in spaces that have flooded or burned or are at high risk of flooding or burning
- records that may contain sizable quantities of cellulose nitrate, particularly pre-1950 photographic negatives or film (See *Conserve O Gram 14/8*, Caring for Cellulose Nitrate Film.)
- materials housed in bat-, bird-, rodent-, or insect-infested spaces (See *Conserve O Gram 3/7*, Monitoring Insect Pests with Sticky Traps.)
- materials housed in mold contaminated spaces (See *Conserve O Gram 3/4*, Mold and Mildew.)
- materials housed near chemical or radiological spills or in spaces that have high radon concentrations
- materials with high pesticide residues

Tour the Site and Plan your Work. Work with staff and a map to locate all storage spaces.

- Involve a variety of staff, such as the archivist, curator, historian, librarian, and records manager in the survey process.
- Coordinate with staff to develop a schedule for the various buildings.
- Get clearance and keys before you start.
- Work systematically from structure-to-structure, floor-to-floor, room-to-room, and wall-to-wall following the same directional pattern throughout the institution.
- Keep a master list of all spaces in which you find records and hazards.

- When noting records locations, use the building and room names provided by staff.
- Determine where your closest lights, water, electricity, and telephone are.
- Identify the risks in each environment so you are prepared to deal with them.

Stay out of elevators, and self-locking spaces, such as attics, basements, closets, bathrooms, crawl spaces, garages, stairwells, or remote spaces after hours.

OSHA requires that all work sites have:

- bathroom facilities
- washing facilities with a clean water supply
- a sound structure with no sagging floors or uncovered gaps or holes in the floors/walls
- ground fault circuit interrupters on all outlets within 10 feet of water
- handrails on each side of all stairways with more than 4 steps and more than a 30 inch rise
- no unidentified contaminating substances
- no hazardous materials
- fire protection/emergency evacuation plans
- adequate light and air flow

Identify Structural Safety Risks. Ask staff:

- Has the building been through a disaster(s)? If so, is it approved for re-entry by an expert?
- When and how was it last renovated?
- Is the structure sound in terms of the:
 - **roof:** What is the age and type? Has an engineer reviewed it?
 - **foundation:** Is it sealed? Is it flaking asbestos concrete? Does water puddle at the foundation or basement?
 - **walls and windows:** Are walls or windows cracked or do they require caulking or sealing? Is the insulation asbestos? Is there lead paint?

- **wiring:** When was the building wiring last renovated? Is the wiring up to code? Any bare wires? Is there asbestos insulation on wiring?
- **plumbing:** When was the plumbing last renovated? Is it up to code? Do any pipes/radiators leak?
- **basement:** Does the basement show signs of flooding? Do ceiling tiles or concrete contain asbestos? Any cracks?
- **attic:** Do the roof, gutters, or pipes leak? Are there signs of insects or vermin infestations (including nests)? Mold? Asbestos insulation?
- **floor loading:** What is the floor loading? Any bulging or bending of floor? Any beam/plaster cracking?
- **HVAC:** How old and what type is it? Problems? What do environmental monitors indicate about the HVAC?

Be Informed. Know how hazardous materials can affect your health. For example:

- **Friable asbestos particles** from insulation, tiles, finishes, coatings and geological specimens can cause:
 - asbestosis
 - cancers, particularly lung cancer
- **Animal corpses, excrement, nests, insects, and frass** can harbor:
 - cholera and dysentery
 - hantavirus (from rodent waste)
 - histoplasmosis (from bird waste)
 - toxoplasmosis
- **Bacteria** can cause many diseases, including:
 - anthrax
 - hepatitis
 - legionellosis (Legionnaire's disease)
 - plague
 - tetanus
- **Fungi and yeasts** can cause:
 - allergies
 - ringworm

- **Viruses** can cause:
 - lassa fever
 - lymphocytic choriomeningitis
 - rabies

If you have personal health conditions, such as severe allergies, diabetes, or epilepsy, which require monitoring and medication, alert other team members to your condition. Keep medications on hand.

Begin Surveying. Before you begin, arrange for personal protective equipment, good lighting, and washing facilities. When you begin surveying use these precautions:

- Work as a team with survey team members and the contract/detailed archivist.
- Wear your protective equipment/clothing.
- Use a ladder, not a chair or box, to stand on.
- Ask for help as necessary in lifting or moving heavy or awkward items.
- Avoid stirring up dust or particles.
- Don't handle vermin corpses or refuse without appropriate protection/training.
- Move materials as little as possible, then put them back in their original place.
- Lift with your legs, not your back.
- Take stretching breaks regularly.
- Regularly wash nitrile gloved hands **before and after** removing gloves.
- Don't eat or smoke in your workspaces.
- Remove your smock before eating; then replace it after eating with a clean smock.
- Don't go into crawl spaces or remote areas unless you are certain they are structurally safe, staff know your location, you are wearing appropriate protective equipment, and you have a cell phone or two-way radio.

- Take regular breaks. Excessive cold, heat or exertion can exhaust you, leading to serious risks.
- Discard protective clothing or wash clothes after each work day.

Testing. Protect yourself if you must take samples of substances for toxicity testing. Wear protective clothing, as described above. Don't stir up dust by excessive sweeping, brushing materials, or vacuuming.

Supplies

Respirators and Protective Clothing are available from: Lab Safety Supply, PO Box 1368, Janesville, WI 53547-1368; Tel: 1-800-356-0783; On the Web at < www.labsafety.com > .

Resources

National Institute of Environmental Health Science's Environmental Diseases from A to Z. Available from: PO Box 12233, Research Triangle Park, NC 27709, Mail Drop EC-12; Tel: 919-541-7860 or < www.niehs.nih.gov/external/a2z/home.htm > .

OSHA Website: < www.osha.gov > .

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Diane Vogt-O'Connor
Senior Archivist
Museum Management Program
National Park Service
Washington, DC 20240

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