

# MA Department of Conservation and Recreation Office of Cultural Resources Best Management Practices

## **Mothballing Historic Buildings**

Contact: Jeffrey Harris, OCR, 617-626-4936

jeffrey.harris@state.ma.us

**Goal**: <u>Stabilize</u> historic vacant buildings to "buy time" for developing preservation plan; <u>prevent total loss</u> of significant cultural resources; <u>protect</u> public safety.



## **Guidelines:**

#### General

- Consider mothballing a historic building if it is surplus to park needs and if the building is expected to stand vacant for more than 3 years. Empty buildings deteriorate fast.
- Mothball the building as soon as possible to halt deterioration.
- Do not forget about the mothballed building. Park staff should regularly monitor for storm damage, holes in the roof and walls, break-ins and other vandalism.
- Mothballing may include vegetation removal; plants should be cut to grade only, with NO DIGGING unless the DCR Archaeologist is consulted beforehand.
- Shut off and secure all utilities to the building and related systems, including electric, gas, and water.
- For information on mothballing procedures related to fire safety, please refer to this DCAMM document: http://www.mass.gov/anf/docs/dcam/mafma/manuals/recommended-procedures-for-closure-state-facilities.pdf
- Contact OCR for a detail of a window panel and for assistance in developing a full mothballing scope customized to your building(s).
- Consider underused historic buildings for the Historic Curatorship program (link to TF9)
- If a building returns to active use, refer to the "Historic Building Maintenance" BMP.

### Mothballing

#### Vegetation management

• Remove all vegetation on the building, including gutters, downspouts, roof valleys and window wells. Large plants should be cut as close to the building as possible; smaller ones can be pulled as long as removal does not damage the building in any way.

- · Clear dirt and debris from roof, roof valleys, gutters, downspouts and window wells
- Cut back growth within 10' of building (in the case of unwanted invasives and volunteer plants)
- Prune historic plantings regularly
- Prune trees around historic buildings to prevent storm damage and to eliminate sources of entry for pests and critters
- Barns and other utilitarian buildings can be completely cleared of vegetation unless evidence (on site and in historic records) indicates historic plantings survive

A properly mothballed building should have a secure and well-vented roof and exterior envelope:

- Assess the condition of the roof and determine if replacement is warranted; address drainage gutters/downspouts (consult with OCR)
- If replacement is not possible, **patch the roof** with like materials or protect with a tarp and strapping.
- First floor, basement, and accessible areas Enclose exterior **openings** with well-vented plywood panels; attach panels to interior braces with long carriage bolts passed through open sash; do not nail or screw to historic wooden trim or framing (contact OCR for detail)
- Shoring is needed where structural instability is evident (rotted sills, deteriorated floor joists, rafters, wall
  framing, bulging foundation walls). Shoring includes temporary support through columns, beams, and
  bracing until a more thorough repair plan can be implemented. This type of structural stabilization should
  only be undertaken under the guidance of an engineer or architect.
- Remove all combustible and flammable materials (furniture, trash, debris) from the inside of the building and from the immediate building site.
- Consider property for inclusion in DCR's Historic Curatorship Program (link to webpage http://www.mass.gov/dcr/stewardship/curator/index.htm)

## **Basic Monitoring Checklist for Mothballed Buildings**

Regular inspection of a mothballed building should include an assessment of the exterior envelope and identification of any new damage. Inspect a minimum of 2x/year.

Yes	No	
		Window and door coverings (and locks) are damaged or show signs of tampering
		willdow and door coverings (and locks) are damaged or show sights or tampeting
		There are signs of vandalism (graffiti, trash, bottles, charred wood)
		Roof and gutters are clogged, disconnected, or missing
		Branches and other vegetation are touching or leaning on the building, fences or
		secondary structures (porches, garages, etc.)
		There are signs of animal infestation or unauthorized human occupation

If "yes" to any of the above, report conditions to OCR and the regional engineer.