CONSERVATION CENTER
for Art & Historic Artifacts

DIY Preservation:
From Monitoring to Management
CONSERVATION CENTER FOR ART & HISTORIC ARTIFACTS

In a typical year:

• Preservation Services specialists complete over 50 survey projects.

• Approximately 60 CCAHA-sponsored workshops, conferences, webinars, and training sessions are presented.

• The Digital Imaging Services staff digitizes thousands of pages of fragile archival documents, books, and photographs.

• Conservators assess and treat more than 6,000 individual artifacts, from over 400 clients.

• Housing & Framing Services house approx. 75% of the artifacts treated (folder, sleeve, box, mat and frame, or sealed package).
DIY PRESERVATION
FROM MONITORING TO MANAGEMENT
PRESENTED BY MELANIE BUMP
CURATOR OF COLLECTIONS AND EXHIBITS - MORRIS COUNTY PARKS COMMISSION
AUGUST 23, 2023
FOR THE
CONSERVATION CENTER FOR ART AND HISTORIC ARTIFACTS
PRESENTATION OUTLINE

➢ ABOUT MCPC
➢ THE BIG QUESTIONS
➢ PROJECT OVERVIEW
➢ BIG TAKEAWAYS
➢ HOW TO RETROFIT A CABINET
➢ WHAT BIG QUESTIONS DO YOU HAVE?
➢ WHAT STRATEGIES ARE YOU TESTING?
ABOUT MORRIS COUNTY PARK COMMISSION

➢ LARGEST COUNTY PARK SYSTEM BASED ON ACREAGE

➢ 38 FACILITIES: HISTORIC SITES, GOLF COURSES, OUTDOOR EDUCATION, RECREATION SITES, ARBORETA, ICE SKATING ARENA AND 253 MILES OF TRAILS

➢ 14 HISTORIC COLLECTIONS

➢ OVER 50,000 OBJECTS, 20,000 IMAGES IN FORMATS FROM DAGUERREOTYPES TO DIGITAL IMAGES, ARCHIVES, SPECIAL COLLECTION BOOKS AND MANUSCRIPTS

➢ STORED IN 18 DIFFERENT BUILDINGS ACROSS MORRIS COUNTY, NJ OF VARYING BUILDING TYPE AND AGE.

➢ NO PURPOSE BUILT STRUCTURES
BIG QUESTIONS WITHOUT AN ANSWER

➢ WHAT DO WE DO WITH ALL THIS DATA?
➢ HOW CAN WE USE THE DATA TO MAKE INFORMED DECISIONS?
➢ IS WHAT WE ARE DOING MAKING A DIFFERENCE?
➢ CAN WE MAKE THE PRESERVATION ENVIRONMENT BETTER?
SUSTAINABLE MANAGEMENT OF COLLECTIONS ENVIRONMENTS WITH LIMITED CONTROLS

PHASE 1 BASELINE STUDY

PHASE 2 EXPERIMENTATION

NATIONAL ENDOWMENT FOR THE HUMANITIES
THANK YOU PROJECT PARTNERS

CHRIS CAMERON, SUSTAINABLE PRESERVATION SPECIALIST, IPI

KELLY MCCAULEY KRISH, PREVENTATIVE CONSERVATION SPECIALIST, IPI

DYANI FEIGE, DIRECTOR OF PRESERVATION SERVICES, CCAHA

MELANIE BUMP, CURATOR OF COLLECTIONS AND EXHIBITS, MCPC

KATIE HUMPHREYS, REGISTRAR, MCPC

ENZO FERRARA, PROJECT INTERN, MCPC

ALEX MILLER, COLLECTIONS ASSISTANT, MCPC
WHY WE DID IT?

➢ FACED WITH CHALLENGING ENVIRONMENTAL CONDITIONS
➢ HISTORIC STRUCTURES LACKING HVAC CONTROLS
➢ LITTLE TO NO ABILITY TO IMPROVE CONDITIONS
➢ NEEDED SUSTAINABLE, PRACTICAL AND LOW COST SOLUTIONS
➢ THE FIELD LACKED STRATEGIES
➢ WITH THE HELP OF OUR PARTNERS WE DISCOVERED OUR OWN
WHAT DID WE DO?

BASELINE OF SPACES
MONITORING

TESTED PASSIVE MEASURES
CURTAINS, BOXES, CABINETS

July 2020 Shade Test

TESTED MECHANICAL MEASURES
HEATING AND COOLING

September 2020 Experiment

Radiator: Winter 2020-2021
WHAT WE LEARNED?

BASELINE OF SPACES

Limitations of the spaces

PASSIVE MEASURES

Firesafe cabinet

MECHANICAL MEASURES

Maintenance and Upkeep
KEY SUCCESSES

CONSERVATION HEATING

GRAPHS OF ENCOURAGEMENT

MUSEUM CABINET RETROFIT

Seasonal Setpoints

Reduced Mold Risk

Using cabinets to buffer conditions
HOW TO RETROFIT A CABINET?

Measure

Cut

Marvel Seal

Foam
HOW TO RETROFIT A CABINET?

1) MARVELSEAL 360 BARRIER FILM:  
   - MEASURE INSIDE THE CABINET (CLEAR SHELVES IF POSSIBLE) INCLUDING: SIDES, TOP, BOTTOM AND BACK WALL  
   - CUT PIECES OF MARVELSEAL TO COVER THE INTERIOR OF THE CABINET  
   - TAPE OR GLUE DOWN THE MARVEL SEAL, ENSURE A TIGHT FIT  
   - REPLACE SHELVES (IF REMOVED)  
   - USE MARVEL SEAL TAPE TO PATCH ANY RIPS

2) ETHAFOAM:  
   - MEASURE SIDES AND BACK WALL BETWEEN SHELVES  
   - MARK ETHAFOAM USING THE MEASUREMENTS AND CUT PIECES OF ETHAFOAM.  
   - TAPE DOWN THE ETHAFOAM, A TIGHT FIT MAY NOT REQUIRE TAPE.

3) MATERIALS CAN BE ADDED TO THE CABINET.

Supply list:  
- Marvelseal 360 Barrier Film:  
  (Polyethylene, foil with polycotton-scrim)  
- Ethafoam Planks, we used (12W x 24L x (1"D))  
- Polyester double sided tape  
- Adhesive- Paper Frame Sealing Tape with Release Liner or other pH-Neutral glue

Other items to have on hand:  
- Scissors, box cutter  
- Spatula, bone folder  
- Measuring tape, ruler  
- Pencil or marker

Note: The depth of the Ethafoam results in less storage capacity. Plan to accommodate displaced materials.
WHAT ARE YOU TRYING?

➢ WHAT BIG QUESTIONS DO YOU HAVE ABOUT YOUR SPACES?
➢ WHAT STRATEGIES ARE YOU TESTING?
HELPFUL RESOURCES

- COLLECTIONS ENVIRONMENT INFOGRAPHIC | CONSERVATION CENTER FOR ART & HISTORIC ARTIFACTS (CCAHA.ORG)
- TEMPERATURE, RELATIVE HUMIDITY, AND DEW POINT FOR COLLECTIONS | CONSERVATION CENTER FOR ART & HISTORIC ARTIFACTS (CCAHA.ORG)
- DEW POINT CALCULATOR HTTP://DPCALC.ORG/
- UNDERSTANDING DEW POINT, IPI HTTPS://S3.CAD.RIT.EDU/IPI-ASSETS/PUBLICATIONS/DEW_POINT.PDF
- UNDERSTANDING PRESERVATION METRICS, IPI HTTPS://S3.CAD.RIT.EDU/IPI-ASSETS/PUBLICATIONS/UNDERSTANDING_PRESERVATION_METRICS.PDF
- ENVIRONMENTAL MANAGEMENT QUICK REFERENCE, IPI HTTPS://S3.CAD.RIT.EDU/IPI-ASSETS/PUBLICATIONS/HVAC_REFERENCE.PDF
- SUSTAINABLE HERITAGE BLOG — SUSTAINABLE HERITAGE (LESSCARBONMORECULTURE.COM)
- PRACTICAL APPROACHES TO COLLECTIONS CARE, SAMANTHA FORSKO, ROUTLEDGE, 2022.
- NEH- PRESERVATION ASSISTANCE GRANT FOR SMALLER INSTITUTIONS (APPLICATION AVAILABLE OCTOBER 12, 2023) PRESERVATION ASSISTANCE GRANTS FOR SMALLER INSTITUTIONS (NEH.GOV)
OTHER LESSONS LEARNED

Summary of recommendations

<table>
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<th>Location</th>
<th>Spring/Summer</th>
<th>Fall/Winter</th>
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<tr>
<td></td>
<td>S  C  E  SP  D</td>
<td>S  C  E  SP  D</td>
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- Summary table (X indicates key component of sustainable environmental management strategy, whereas x actions are less critical but can be helpful):
  - S = Shades
  - C = Cabinets
  - P = Enclosures
  - S = Seasonal set points (conservation heating)
  - D = Dehumidification (coupled with fans)

Curtains  Seasonal Strategies  Reorganizing Storage