

# 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?



# Collections

## 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



# Exhibits

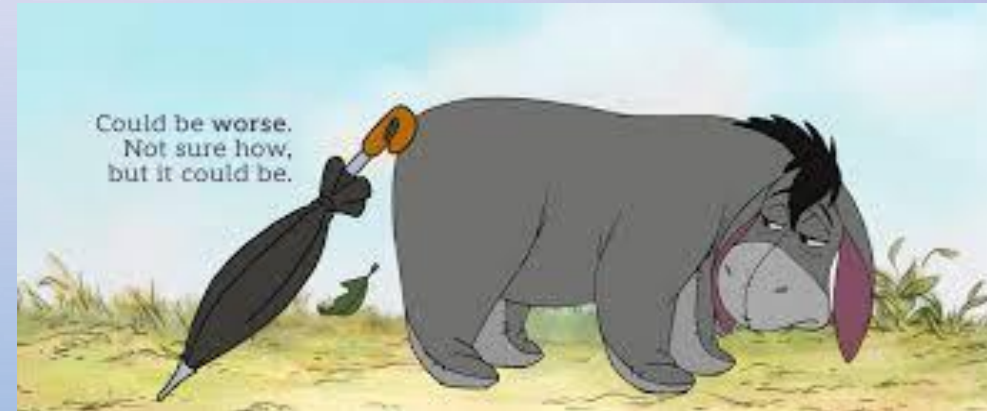
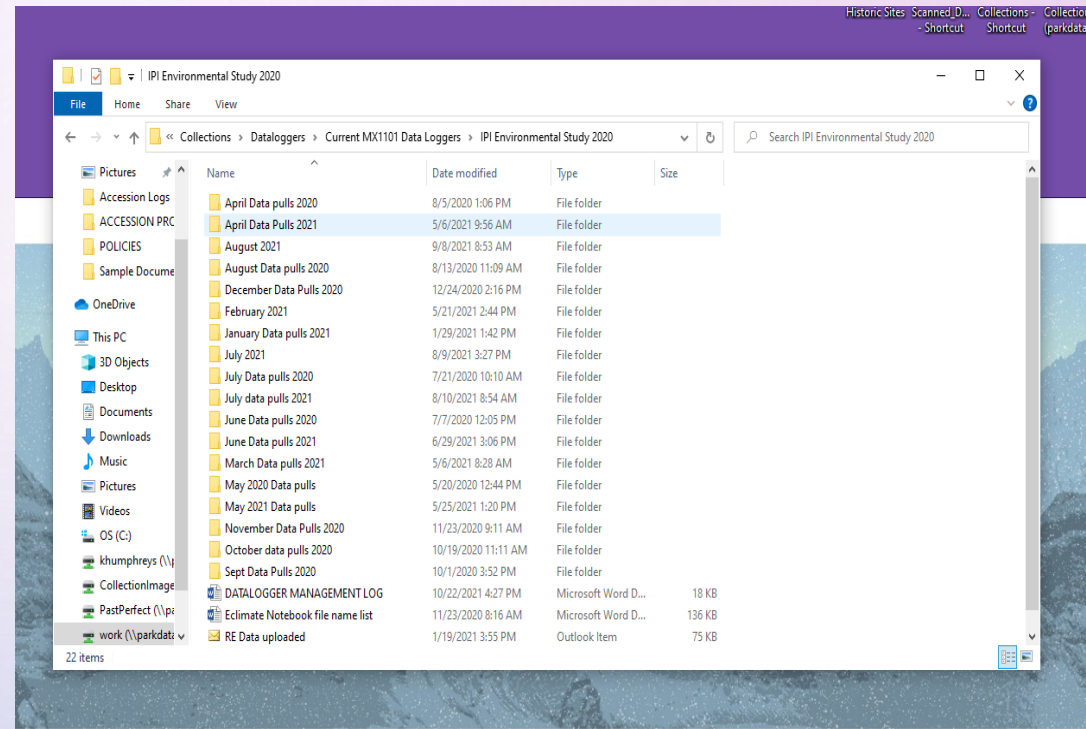


# Storage



# BIG QUESTIONS WITHOUT AN ANSWER

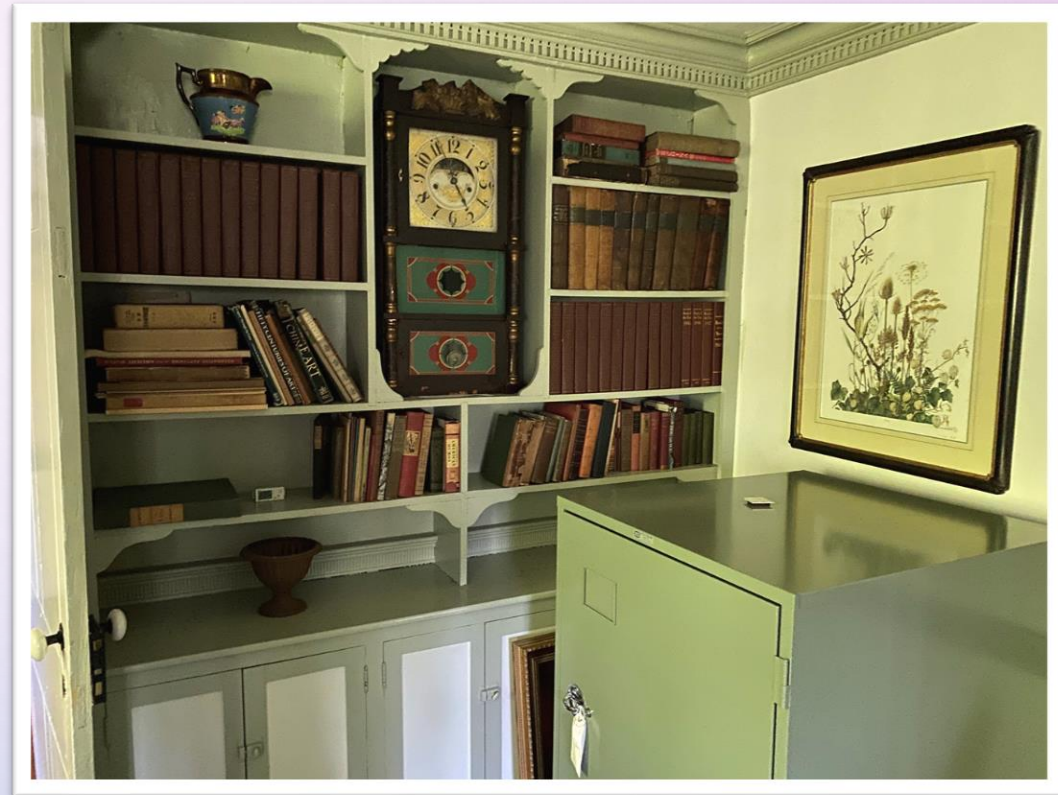
- WHAT DO WE DO WITH ALL THIS DATA?
- HOW CAN WE USE THE DATA TO MAKE INFORMED DECISIONS?
- IS WHAT WE ARE DOING MAKING A DIFFERENCE?
- CAN WE MAKE THE PRESERVATION ENVIRONMENT BETTER?



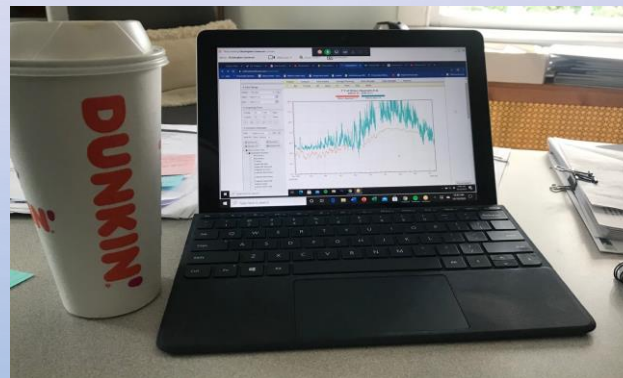
# SUSTAINABLE MANAGEMENT OF COLLECTIONS ENVIRONMENTS WITH LIMITED CONTROLS

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

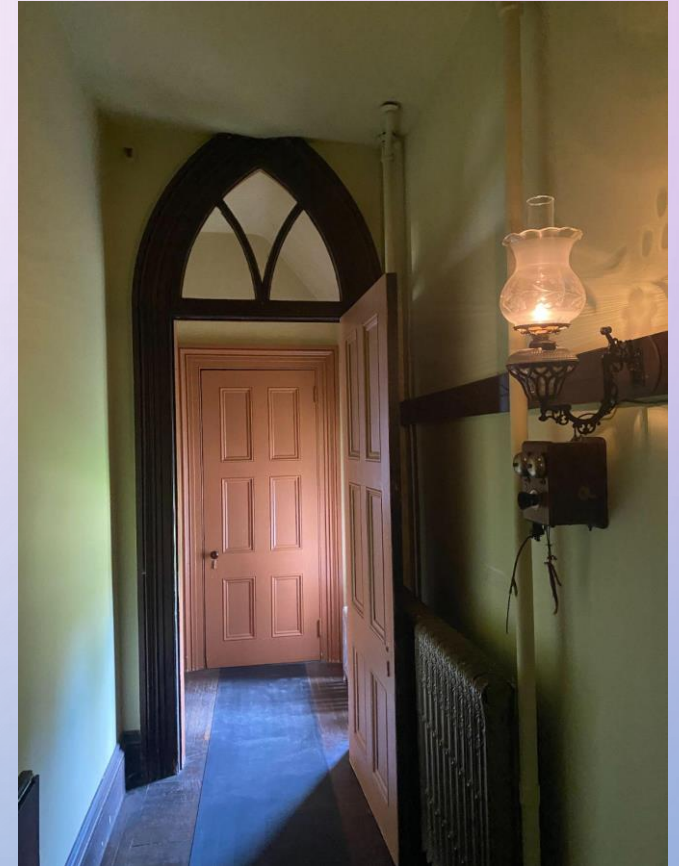
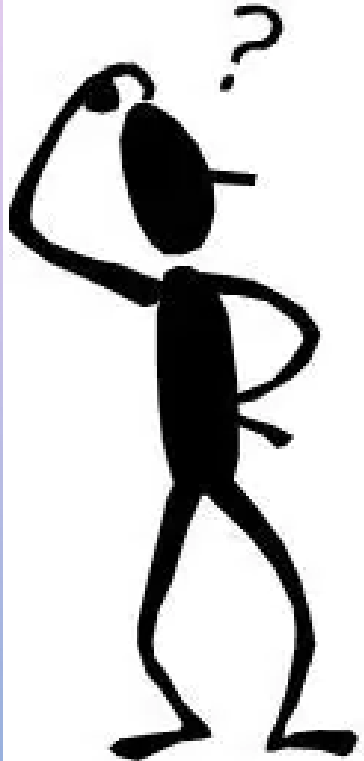
ALEX MILLER, COLLECTIONS ASSISTANT, MCPC





# WHY WE DID IT?

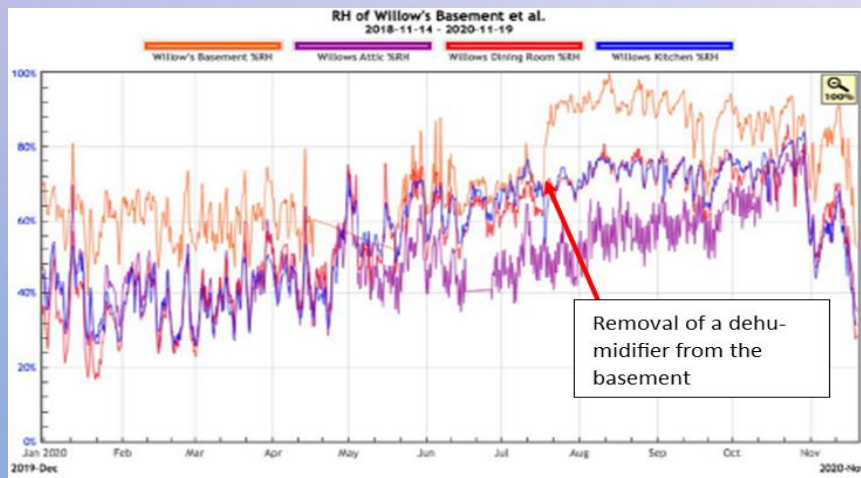
- FACED WITH CHALLENGING ENVIRONMENTAL CONDITIONS
- HISTORIC STRUCTURES LACKING HVAC CONTROLS
- LITTLE TO NO ABILITY TO IMPROVE CONDITIONS
- NEEDED SUSTAINABLE, PRACTICAL AND LOW COST SOLUTIONS
- THE FIELD LACKED STRATEGIES
- WITH THE HELP OF OUR PARTNERS WE DISCOVERED OUR OWN



# WHAT DID WE DO?

## BASELINE OF SPACES

MONITORING



## TESTED PASSIVE MEASURES

CURTAINS, BOXES, CABINETS



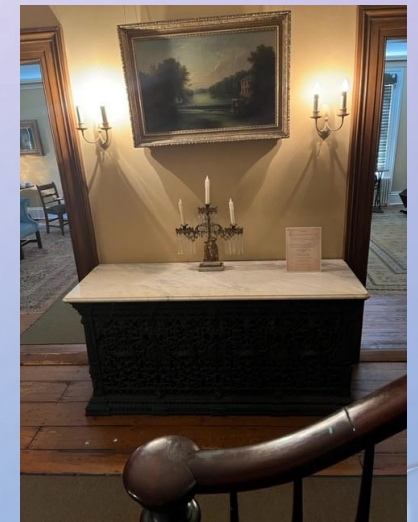
July 2020 Shade Test

## TESTED MECHANICAL MEASURES

HEATING AND COOLING



September 2020 Experiment



Radiator: Winter 2020-2021

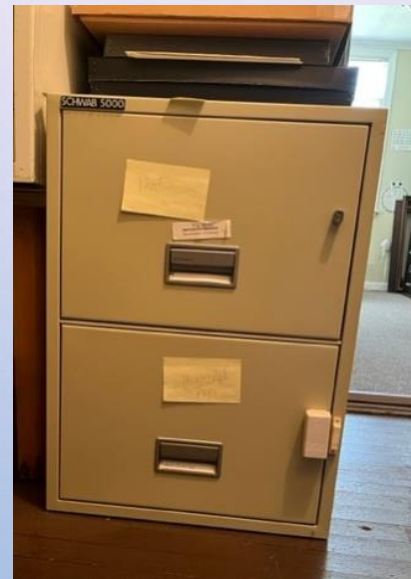
# WHAT WE LEARNED?

## BASELINE OF SPACES



Limitations of the spaces

## PASSIVE MEASURES



Firesafe cabinet

## MECHANICAL MEASURES



Maintenance and Upkeep



# KEY SUCCESSES

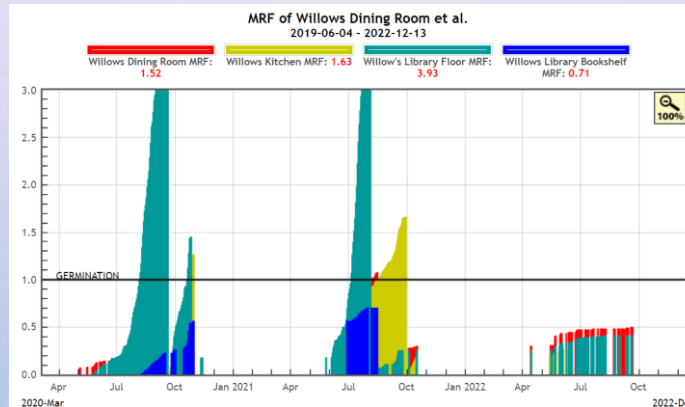


## CONSERVATION HEATING



Seasonal Setpoints

## GRAPHS OF ENCOURAGEMENT



Reduced Mold Risk

## MUSEUM CABINET RETROFIT

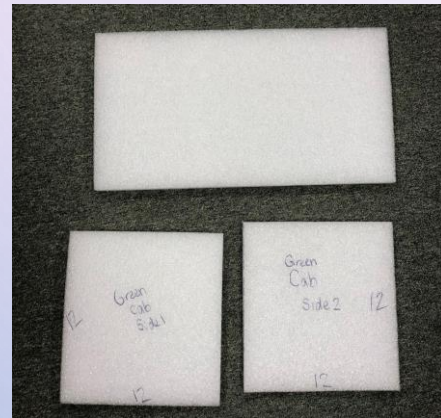


Using cabinets to buffer conditions

# HOW TO RETROFIT A CABINET?



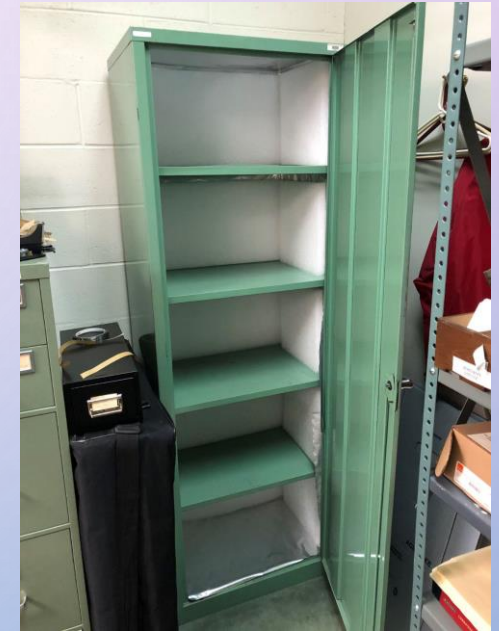
Measure



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: (Polythylene, 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/](http://dpcalc.org/)
- UNDERSTANDING DEW POINT, IPI [HTTPS://S3.CAD.RIT.EDU/IPI-ASSETS/PUBLICATIONS/DEW\\_POINT.PDF](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](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](https://s3.cad.rit.edu/ipi-assets/publications/hvac_reference.pdf)
- SUSTAINABLE HERITAGE [BLOG — SUSTAINABLE HERITAGE \(LESSCARBONMORECULTURE.COM\)](https://www.lesscarbonmoreculture.com/blog)
- *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 \(NEH.GOV\)](https://www.neh.gov/grants/preservation-assistance-grants-for-smaller-institutions)

# OTHER LESSONS LEARNED



Curtains

## Summary of recommendations

Location	Spring/Summer					Fall/Winter				
	S	C	E	SP	D	S	C	E	SP	D
Tubbs House	X	X				X	X		X	
Willows	X				X	X			X	
Vail House	X	X	X		X	X	X	X		
Haggerty Education Center		X	X		X		X	X		

- 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.
  - E = Enclosures.
  - S = Seasonal set points (conservation heating)
  - D = Dehumidification (coupled with fans).



Reorganizing Storage

# MORE TESTING



Storm Windows



Cabinet Test