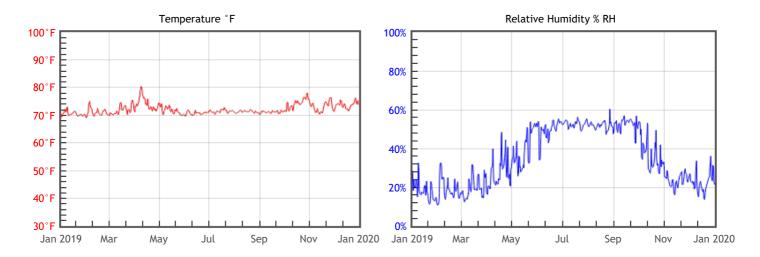
# Special Collections - Back Work Room

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#### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = <b>47</b>	Generally OK, but fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics will be at elevated risk due to the cumulative effects of temperature and humidity
Mechanical Damage Physical damage to hygroscopic materials	RISK  % DC = 1.63 % EMC min = 3.9 % EMC max = 9.7	Heightened risk of physical damage to any hygroscopic material, such as paintings, rare books, furniture, paper, leather, film, or color photos, due to extremely low or high levels of humidity, and / or excessive humidity fluctuation.
Mold Risk Mold growth in area or on collection objects	GOOD MRF = 0	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	OK % EMC max = 9.7	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

# Graphs



Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	72	%RH Mean	35	DP°F Mean	40.4	
T°F Median	71.5	%RH Median	31	DP°F Median	41.8	
T°F Stdev	1.9	%RH Stdev	15	DP°F Stdev	11.8	
T°F Min	68.7	%RH Min	11	DP°F Min	12	
T°F Max	80.9	%RH Max	60	DP°F Max	58	

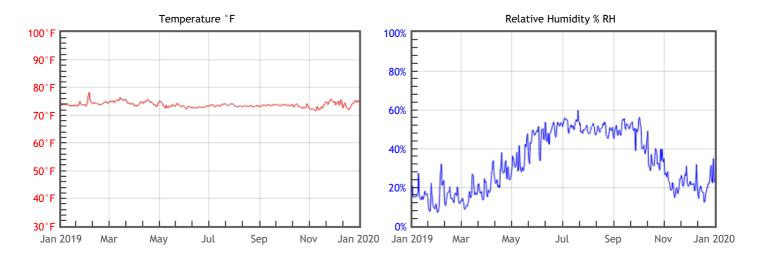
# **Special Collections - Reading Room Closet**

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#### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	RISK TWPI = 44	Accelerated rate of chemical decay in all organic materials due to the cumulative effects of temperature and humidity, with especially high risk for fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics.
Mechanical Damage Physical damage to hygroscopic materials	RISK  % DC = 1.74 % EMC min = 3.3 % EMC max = 9.5	Heightened risk of physical damage to any hygroscopic material, such as paintings, rare books, furniture, paper, leather, film, or color photos, due to extremely low or high levels of humidity, and / or excessive humidity fluctuation.
Mold Risk  Mold growth in area or on collection objects	GOOD  MRF = 0	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	OK % EMC max = 9.5	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

## **Graphs**



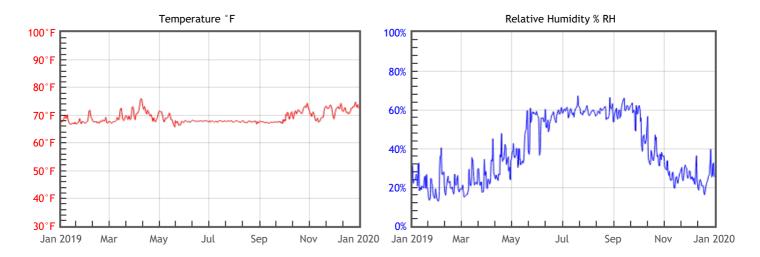
Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	73.8	%RH Mean	33	DP°F Mean	39.8	
T°F Median	73.6	%RH Median	30	DP°F Median	40.9	
T°F Stdev	0.9	%RH Stdev	15	DP°F Stdev	13.1	
T°F Min	71.5	%RH Min	7	DP°F Min	4.8	
T°F Max	78.4	%RH Max	60	DP°F Max	59.4	

**Special Collections - Stacks**MSU Libraries • Main • Special Collections • Storage Areas Michigan State University Libraries

### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 51	Generally OK, but fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics will be at elevated risk due to the cumulative effects of temperature and humidity
Mechanical Damage Physical damage to hygroscopic materials	RISK  % DC = 1.81 % EMC min = 4.5 % EMC max = 11	Heightened risk of physical damage to any hygroscopic material, such as paintings, rare books, furniture, paper, leather, film, or color photos, due to extremely low or high levels of humidity, and / or excessive humidity fluctuation.
Mold Risk Mold growth in area or on collection objects	GOOD  MRF = 0	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	RISK  % EMC max = 11	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

# Graphs



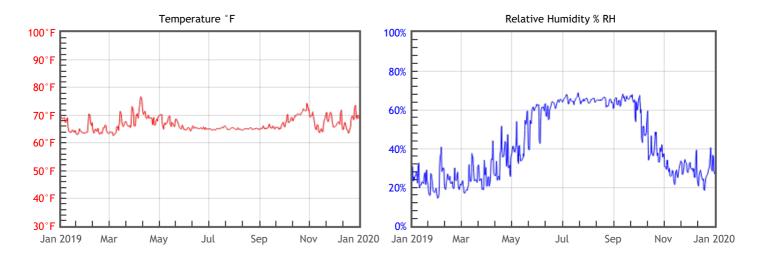
Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	69.1	%RH Mean	39	DP°F Mean	40.9	
T°F Median	68	%RH Median	35	DP°F Median	42.1	
T°F Stdev	2.1	%RH Stdev	16	DP°F Stdev	11.3	
T°F Min	65.7	%RH Min	12	DP°F Min	13.6	
T°F Max	76.1	%RH Max	69	DP°F Max	57.7	

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### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 54	Generally OK, but fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics will be at elevated risk due to the cumulative effects of temperature and humidity
Mechanical Damage Physical damage to hygroscopic materials	RISK  % DC = 2.01 % EMC min = 4.9 % EMC max = 12.1	Heightened risk of physical damage to any hygroscopic material, such as paintings, rare books, furniture, paper, leather, film, or color photos, due to extremely low or high levels of humidity, and / or excessive humidity fluctuation.
Mold Risk Mold growth in area or on collection objects	GOOD  MRF = 0	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	RISK  % EMC max = 12.1	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

# Graphs



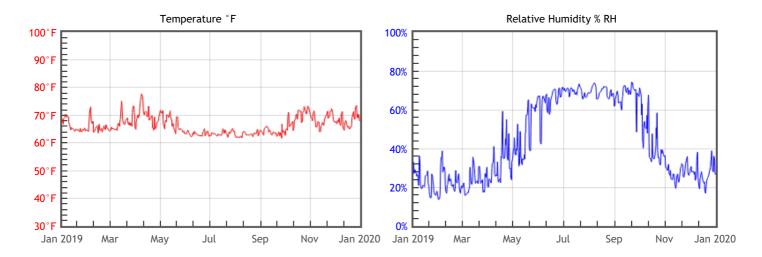
Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	66.7	%RH Mean	42	DP°F Mean	41	
T°F Median	65.7	%RH Median	37	DP°F Median	42.6	
T°F Stdev	2.6	%RH Stdev	18	DP°F Stdev	11.5	
T°F Min	62.6	%RH Min	14	DP°F Min	14.4	
T°F Max	76.9	%RH Max	71	DP°F Max	57.4	

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#### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 53	Generally OK, but fast decaying organic materials such as acidic paper, color photographs and cellulosic plastics will be at elevated risk due to the cumulative effects of temperature and humidity
Mechanical Damage Physical damage to hygroscopic materials	RISK  % DC = 2.39 % EMC min = 4.7 % EMC max = 13.2	Heightened risk of physical damage to any hygroscopic material, such as paintings, rare books, furniture, paper, leather, film, or color photos, due to extremely low or high levels of humidity, and / or excessive humidity fluctuation.
Mold Risk Mold growth in area or on collection objects	GOOD MRF = 0.3	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	RISK  % EMC max = 13.2	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

# **Graphs**



Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	66.4	%RH Mean	43	DP°F Mean	40.7	
T°F Median	65.3	%RH Median	36	DP°F Median	42.3	
T°F Stdev	3.3	%RH Stdev	20	DP°F Stdev	11.7	
T°F Min	61.3	%RH Min	14	DP°F Min	13.8	
T°F Max	78.6	%RH Max	76	DP°F Max	57.6	