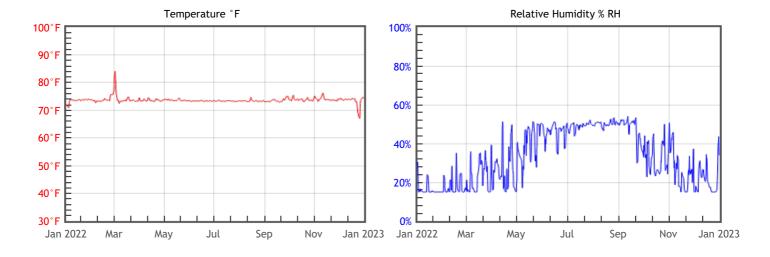
Special Collections - 3E Work Room

MSU Libraries • Main • Special Collections • Work 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 = 45	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 = 1.57 % EMC min = 3.7 % EMC max = 9.4	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 = 9.4	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

Graphs

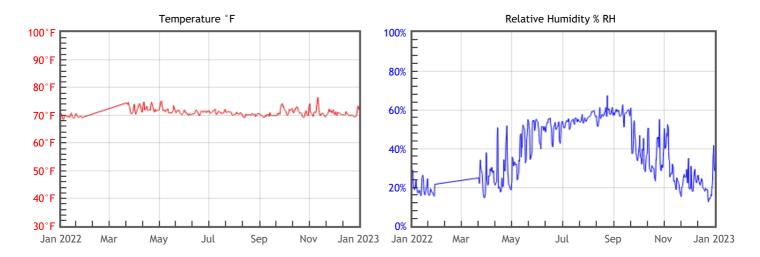


Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	73.6	%RH Mean	33	DP°F Mean	40.3	
T°F Median	73.5	%RH Median	32	DP°F Median	42	
T°F Stdev	1.1	%RH Stdev	14	DP°F Stdev	12.1	
T°F Min	67	%RH Min	15	DP°F Min	17.9	
T°F Max	85.2	%RH Max	66	DP°F Max	62.5	

Preservation Environment Evaluation

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 45	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 = 1.67 % EMC min = 4.6 % EMC max = 10.6	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 = 10.6	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

Graphs



Temperature		Relative H	Relative Humidity		Point
T°F Mean	71	%RH Mean	39	DP°F Mean	42.4
T°F Median	70.7	%RH Median	38	DP°F Median	44.8
T°F Stdev	1.3	%RH Stdev	15	DP°F Stdev	11.5
T°F Min	68.4	%RH Min	12	DP°F Min	15.7
T°F Max	77.3	%RH Max	67	DP°F Max	60.1

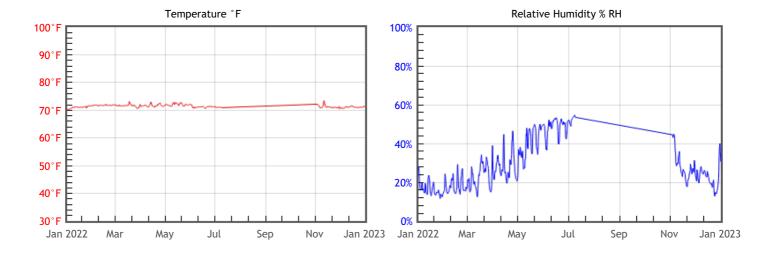
Special Collections - Reading Room Closet

MSU Libraries • Main • Special Collections • Reading Room Michigan State University Libraries

Preservation Environment Evaluation

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 59	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 = 1.53 % EMC min = 3.7 % EMC max = 9.2	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	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	OK % EMC max = 9.2	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

Graphs



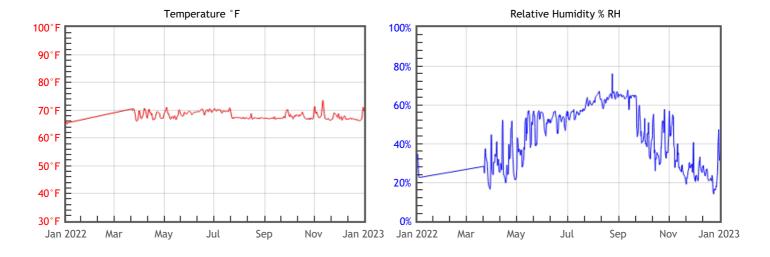
Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	71.5	%RH Mean	29	DP°F Mean	35.6	
T°F Median	71.4	%RH Median	25	DP°F Median	34.1	
T°F Stdev	0.5	%RH Stdev	12	DP°F Stdev	10.9	
T°F Min	69.6	%RH Min	12	DP°F Min	15.4	
T°F Max	73.4	%RH Max	55	DP°F Max	54.1	

Special Collections - StacksMSU 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 = 47	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 = 1.91 % EMC min = 5.2 % EMC max = 12	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 = 0.01	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	RISK % EMC max = 12	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

Graphs



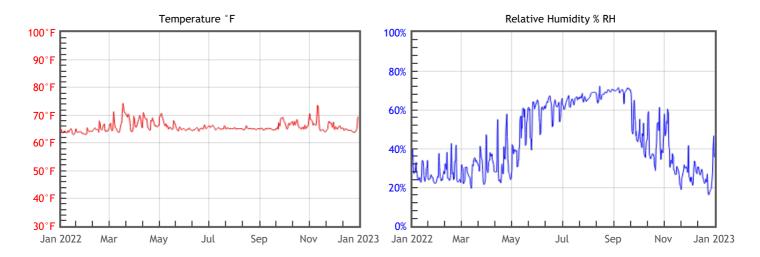
Temperature		Relative H	Relative Humidity		Point
T°F Mean	68.1	%RH Mean	44	DP°F Mean	43.9
T°F Median	67.7	%RH Median	46	DP°F Median	47.3
T°F Stdev	1.3	%RH Stdev	15	DP°F Stdev	10.4
T°F Min	64.7	%RH Min	14	DP°F Min	15.3
T°F Max	73.6	%RH Max	76	DP°F Max	60

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 = 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 = 2.14 % EMC min = 5.5 % 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 = 0.08	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



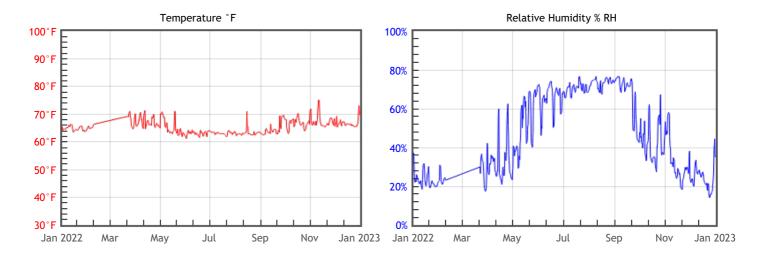
Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	65.8	%RH Mean	44	DP°F Mean	41.4	
T°F Median	65.2	%RH Median	39	DP°F Median	42.4	
T°F Stdev	1.8	%RH Stdev	18	DP°F Stdev	11	
T°F Min	62.9	%RH Min	16	DP°F Min	16.5	
T°F Max	75	%RH Max	79	DP°F Max	60	

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 = 2.58 % EMC min = 5 % EMC max = 14.3	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	RISK MRF = 1.11	Heightened risk of mold growth due to extended periods of high humidity.
Metal Corrosion Corrosion of metal components or objects	RISK % EMC max = 14.3	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

Graphs



Temperature		Relative H	Relative Humidity		oint
T°F Mean	65.3	%RH Mean	47	DP°F Mean	42.1
T°F Median	64.9	%RH Median	44	DP°F Median	44.5
T°F Stdev	2.5	%RH Stdev	21	DP°F Stdev	11.5
T°F Min	60.2	%RH Min	14	DP°F Min	14.8
T°F Max	76.9	%RH Max	87	DP°F Max	60.4