Special Collections - Back Work Room

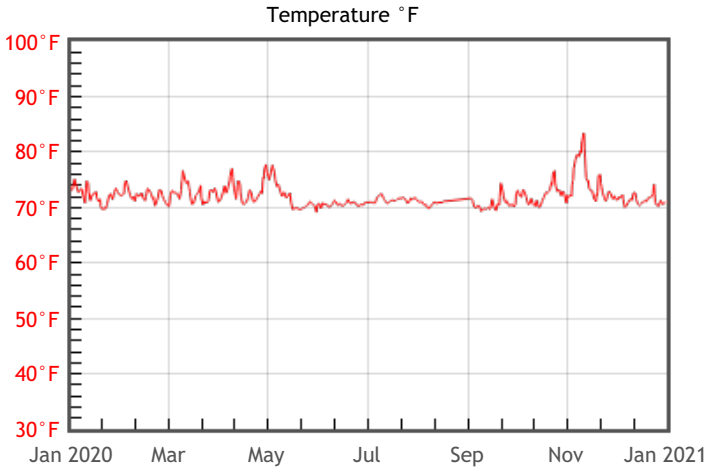
MSU Libraries • Main • Special Collections • Work Areas
Michigan State University Libraries

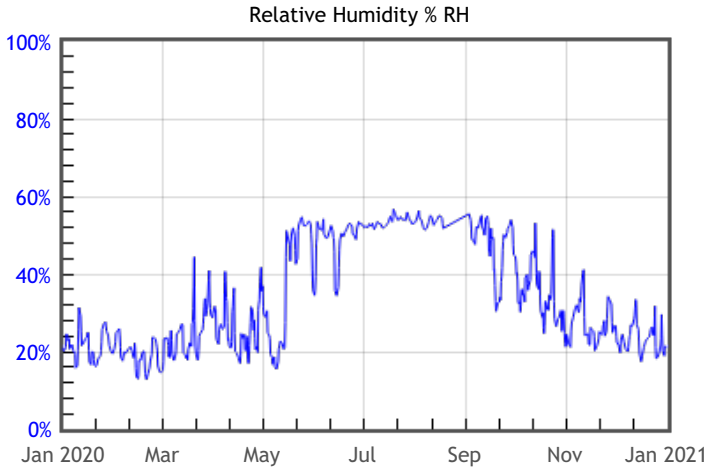
2020-01-01 to 2020-12-31
1 year

Preservation Environment Evaluation

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 48	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 = 1.58 % EMC min = 4.3 % EMC max = 9.9	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 = 9.9	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

Graphs





Statistics

Temperature		Relative Humidity		Dew Point	
T°F Mean	72	**%RH Mean**	34	**DP°F Mean**	40.2
T°F Median	71.5	**%RH Median**	30	**DP°F Median**	39.3
T°F Stdev	2	**%RH Stdev**	14	**DP°F Stdev**	10.5
T°F Min	68.9	**%RH Min**	13	**DP°F Min**	17.6
T°F Max	83.7	**%RH Max**	60	**DP°F Max**	61.3

Special Collections - Reading Room Closet

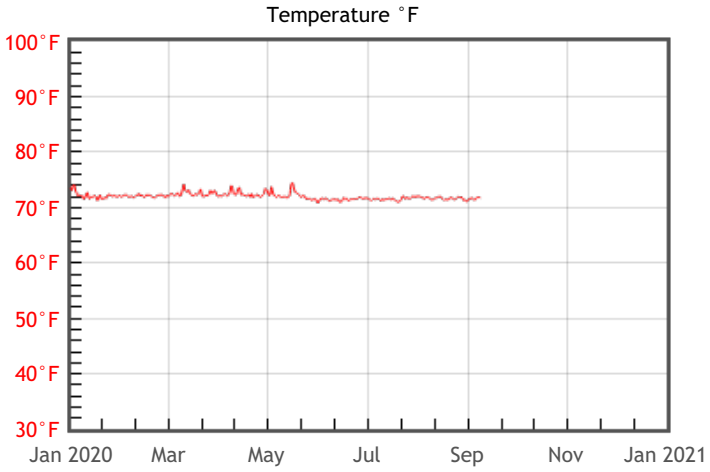
MSU Libraries • Main • Special Collections • Reading Room
Michigan State University Libraries

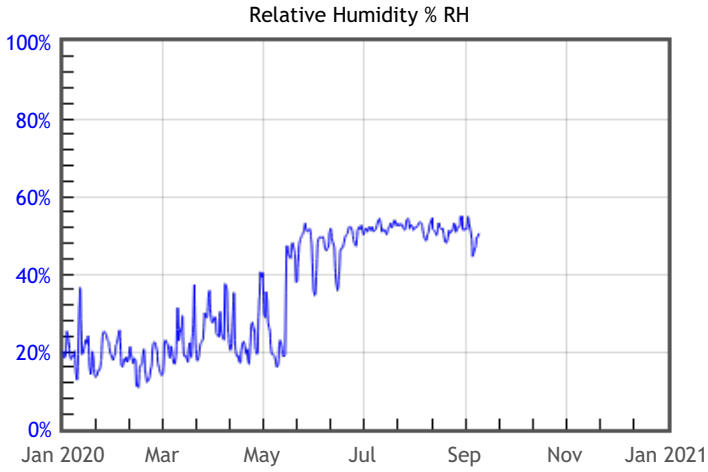
2020-01-01 to 2020-09-08
8 months, 8 days

Preservation Environment Evaluation

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 50	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 = 3.9 % 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





Statistics

Temperature		Relative Humidity		Dew Point	
T°F Mean	72	**%RH Mean**	35	**DP°F Mean**	40.2
T°F Median	71.9	**%RH Median**	32	**DP°F Median**	41.2
T°F Stdev	0.6	**%RH Stdev**	15	**DP°F Stdev**	11.9
T°F Min	70.8	**%RH Min**	10	**DP°F Min**	11.3
T°F Max	75	**%RH Max**	58	**DP°F Max**	56.3

Special Collections - Stacks

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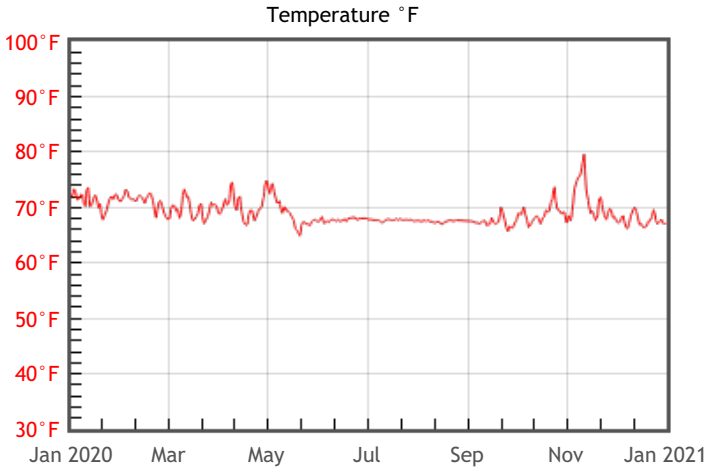
Michigan State University Libraries

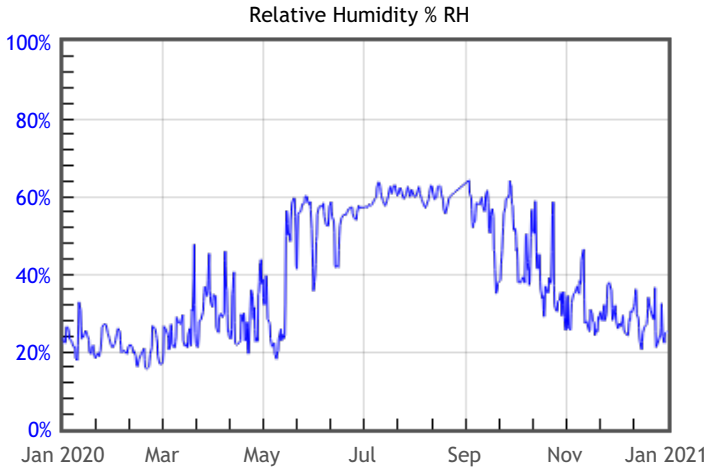
2020-01-01 to 2020-12-31
1 year

Preservation Environment Evaluation

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 52	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 = 1.84 % EMC min = 4.6 % EMC max = 11.2	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	RISK % EMC max = 11.2	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

Graphs





Statistics

Temperature		Relative Humidity		Dew Point	
T°F Mean	69.1	**%RH Mean**	39	**DP°F Mean**	40.9
T°F Median	68.2	**%RH Median**	34	**DP°F Median**	40.3
T°F Stdev	2.2	**%RH Stdev**	15	**DP°F Stdev**	10
T°F Min	64.7	**%RH Min**	14	**DP°F Min**	19.5
T°F Max	79.8	**%RH Max**	68	**DP°F Max**	61.7

Special Collections - Vault

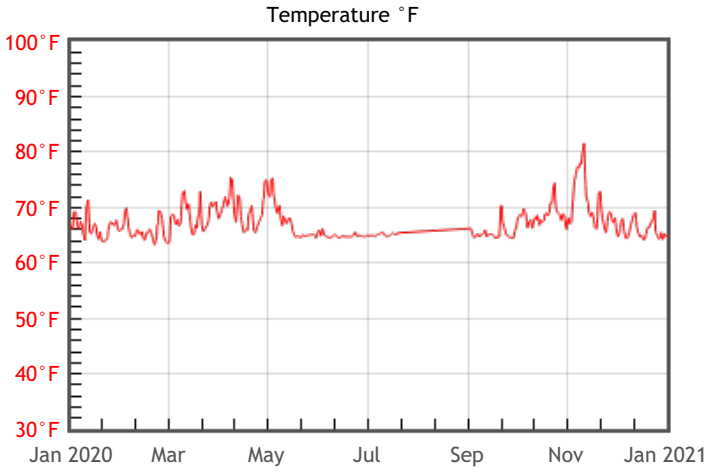
MSU Libraries • Main • Special Collections • Storage Areas
Michigan State University Libraries

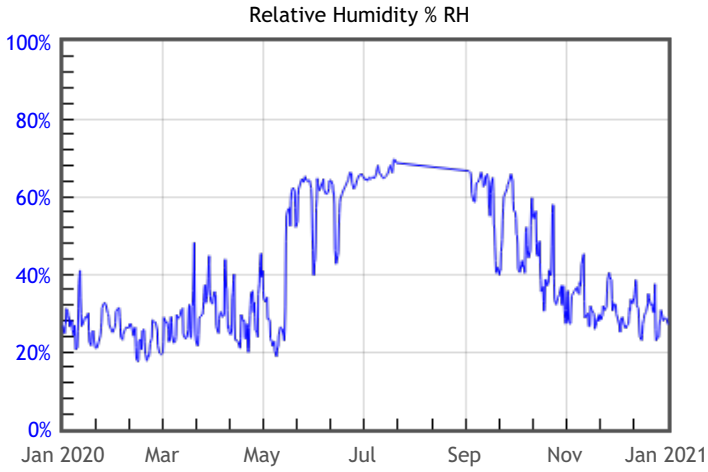
2020-01-01 to 2020-12-31
1 year

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 = 2.11 % EMC min = 5.2 % EMC max = 12.7	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	RISK % EMC max = 12.7	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

Graphs





Statistics

Temperature		Relative Humidity		Dew Point	
T°F Mean	67.2	**%RH Mean**	39	**DP°F Mean**	39.8
T°F Median	66.3	**%RH Median**	33	**DP°F Median**	38.6
T°F Stdev	2.9	**%RH Stdev**	16	**DP°F Stdev**	9.9
T°F Min	63.3	**%RH Min**	17	**DP°F Min**	18.4
T°F Max	81.9	**%RH Max**	71	**DP°F Max**	62.1

Special Collections - Vault 2

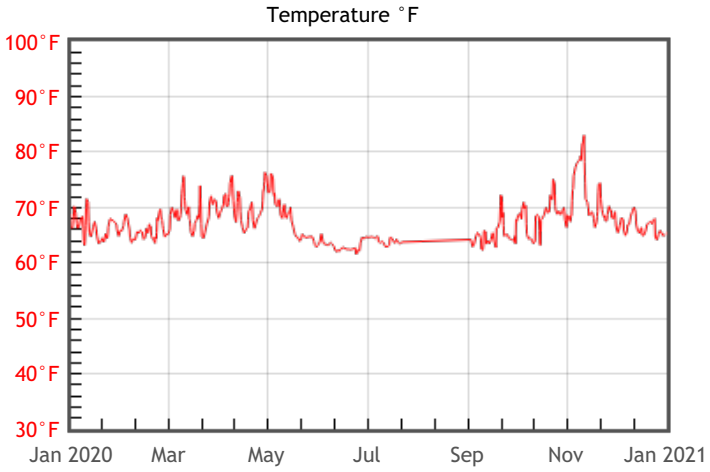
MSU Libraries • Main • Special Collections • Storage Areas
Michigan State University Libraries

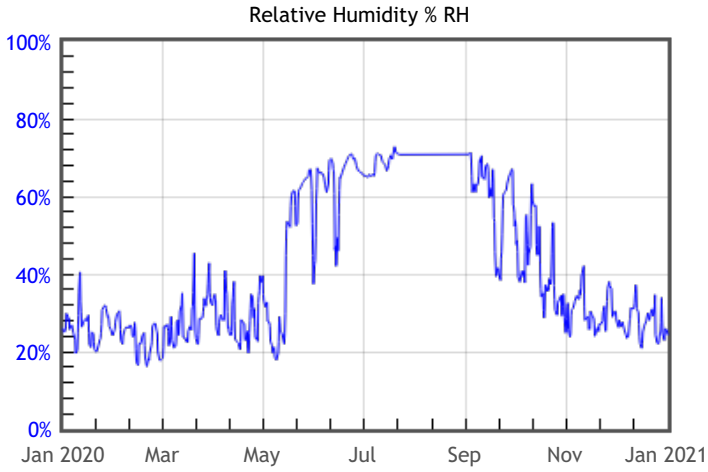
2020-01-01 to 2020-12-31
1 year

Preservation Environment Evaluation

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	OK TWPI = 58	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 = 2.44 % EMC min = 5 % EMC max = 13.7	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 = 0.32	Minimal risk of mold growth.
Metal Corrosion Corrosion of metal components or objects	RISK % EMC max = 13.7	Heightened risk of metal corrosion due to extended periods of high levels of humidity.

Graphs





Statistics

Temperature		Relative Humidity		Dew Point	
T°F Mean	67.1	**%RH Mean**	39	**DP°F Mean**	39.3
T°F Median	66.4	**%RH Median**	32	**DP°F Median**	38.1
T°F Stdev	3.6	**%RH Stdev**	17	**DP°F Stdev**	10.3
T°F Min	61.3	**%RH Min**	16	**DP°F Min**	16.8
T°F Max	83.5	**%RH Max**	77	**DP°F Max**	61.8