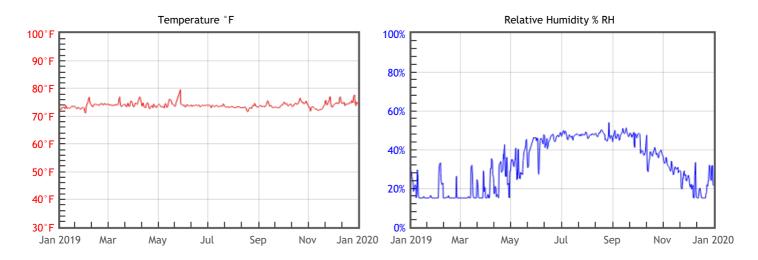
### **Preservation Environment Evaluation**

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 = 1.51 % EMC min = 3.5 % EMC max = 8.9	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 = 8.9	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	73.9	%RH Mean	32	DP°F Mean	40.4	
T°F Median	73.8	%RH Median	33	DP°F Median	43.2	
T°F Stdev	1	%RH Stdev	13	DP°F Stdev	11.6	
T°F Min	71.1	%RH Min	15	DP°F Min	21.1	
T°F Max	79.7	%RH Max	57	DP°F Max	58.5	

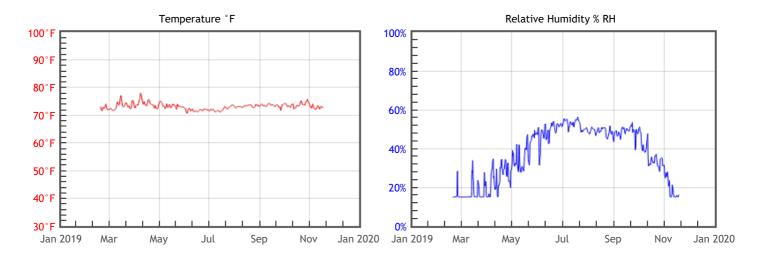
# EG1 (LC RC-Z)

MSU Libraries • Main • General Collections • Ground Level Michigan State University Libraries

### **Preservation Environment Evaluation**

Type of Decay	Risks & Metrics	Evaluation & General Comments
Natural Aging Chemical decay of organic materials	RISK TWPI = 41	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 = 1.63 % 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



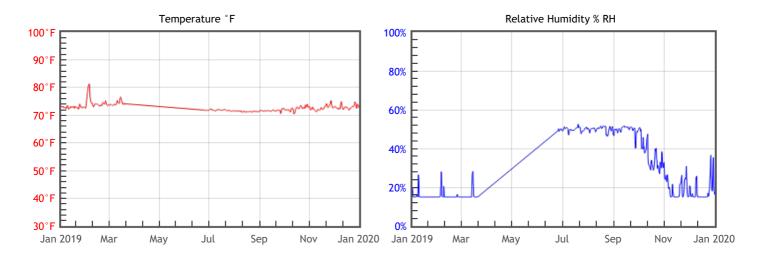
Temperature		Relative Humidity		Dew Point	
T°F Mean	73.1	%RH Mean	37	DP°F Mean	43.4
T°F Median	73.1	%RH Median	42	DP°F Median	48.6
T°F Stdev	1.1	%RH Stdev	14	DP°F Stdev	11.6
T°F Min	70.6	%RH Min	15	DP°F Min	21.5
T°F Max	78.1	%RH Max	62	DP°F Max	59.9

WG1 (LC BS-HB)

### **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 = 1.59 % EMC min = 3.5 % 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



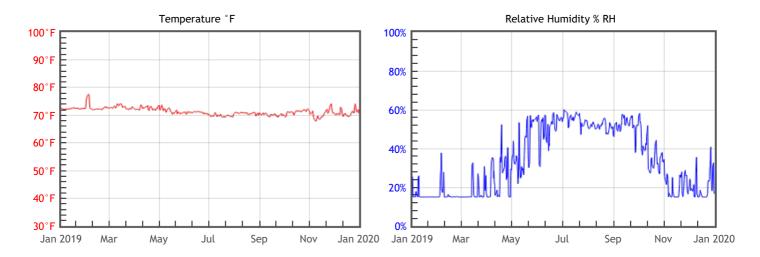
Temperature		Relative H	Relative Humidity		Dew Point	
T°F Mean	72.6	%RH Mean	31	DP°F Mean	37.2	
T°F Median	72.4	%RH Median	27	DP°F Median	37.3	
T°F Stdev	1.4	%RH Stdev	16	DP°F Stdev	13.1	
T°F Min	70.3	%RH Min	15	DP°F Min	21.1	
T°F Max	81.4	%RH Max	53	DP°F Max	54.5	

#### **Preservation Environment Evaluation**

WG16 (LC HC-LT; Q-RB)

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 = 1.83 % EMC min = 3.7 % EMC max = 10.2	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 = 10.2	Generally OK, but archeological or salt-encrusted metals may corrode due to extended periods of moderately high levels of humidity.

### Graphs

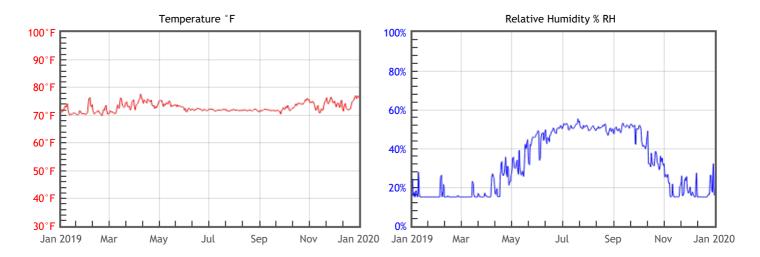


Temperature		Relative Humidity		Dew P	Dew Point	
T°F Mean	71.4	%RH Mean	34	DP°F Mean	38.5	
T°F Median	71.2	%RH Median	31	DP°F Median	40	
T°F Stdev	1.4	%RH Stdev	17	DP°F Stdev	13.2	
T°F Min	67.7	%RH Min	15	DP°F Min	18.4	
T°F Max	77.8	%RH Max	63	DP°F Max	56.5	

#### **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 = 1.69 % EMC min = 3.5 % 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 Humidity		Dew P	Dew Point	
T°F Mean	72.8	%RH Mean	32	DP°F Mean	38.2	
T°F Median	72.2	%RH Median	29	DP°F Median	40.5	
T°F Stdev	1.6	%RH Stdev	15	DP°F Stdev	13	
T°F Min	69.7	%RH Min	15	DP°F Min	20	
T°F Max	77.8	%RH Max	57	DP°F Max	56.4	