



CHILLED WATER SYSTEM FOR EXCESSIVE HEAT MODERATION

IN THE INASMUCH FOUNDATION CRYSTAL BRIDGE CONSERVATORY



Temperature Fact Sheet

INASMUCH FOUNDATION CRYSTAL BRIDGE CONSERVATORY

The ideal temperature range for visitors in the Crystal Bridge is recommended as:

70-72°F – 1ST FLOOR

73-75°F – 2ND FLOOR

80-82°F – 3RD FLOOR

These temperatures are now only generally obtainable when outdoor temperatures are at or below 72°F.

The 2nd level is, on average, at least 3-5°F warmer than 1st floor. The 3rd level is, on average, at least 10-13°F warmer than the 2nd level.

We find that when outdoor temperatures climb over 80°F degrees, the 2nd and 3rd levels become uncomfortable for visitors.

As outdoor temperatures reach over 85°F and especially 90°F, visitors start to shorten their visit and start to complain about heat and humidity levels.

When outdoor temperatures reach over 90°F outside, conditions are not optimal for visiting the Conservatory during high traffic summer months.

Most visitors, especially after 11a.m., cannot leisurely tour the Conservatory as temperatures are increasingly uncomfortable. These higher temperatures can cause dehydration and can be unsafe for older visitors or those with health issues.

Days per Year with High Temperatures over 72°F in Oklahoma City: 203

Days with temps over 80°F: 151

Days with temps 90°F: 83

Days with temps 100°F: 18

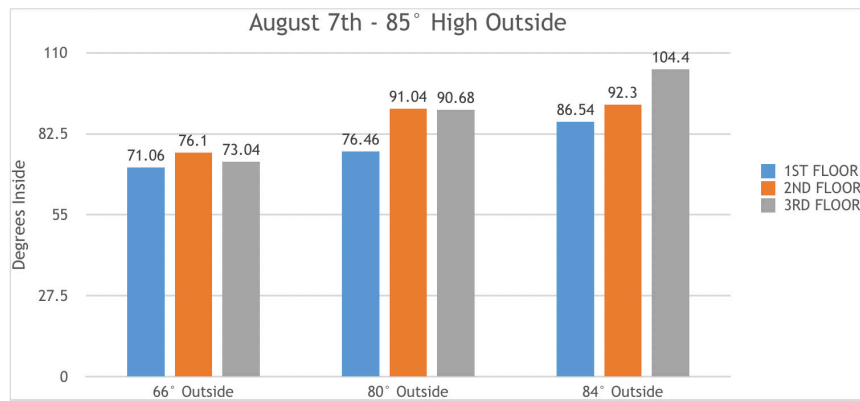
Replacement of outdated air handling units (AHU's) would help moderate temperatures by a range of 8-14 degrees F.



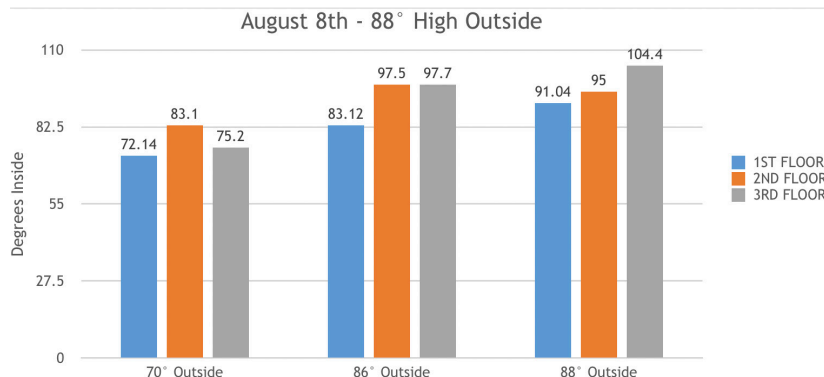
Installation of a new chilled water system would further enable the Conservatory to have comfortable temperatures in the warm season months.

This will greatly improve visitor experience, increase visitation along with revenues from admission tickets, gift shop sales, memberships and private rentals.

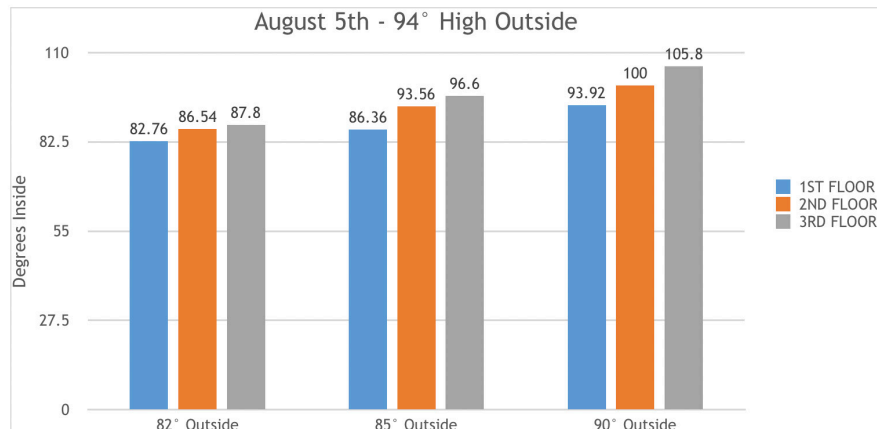
Close to 85° Fahrenheit



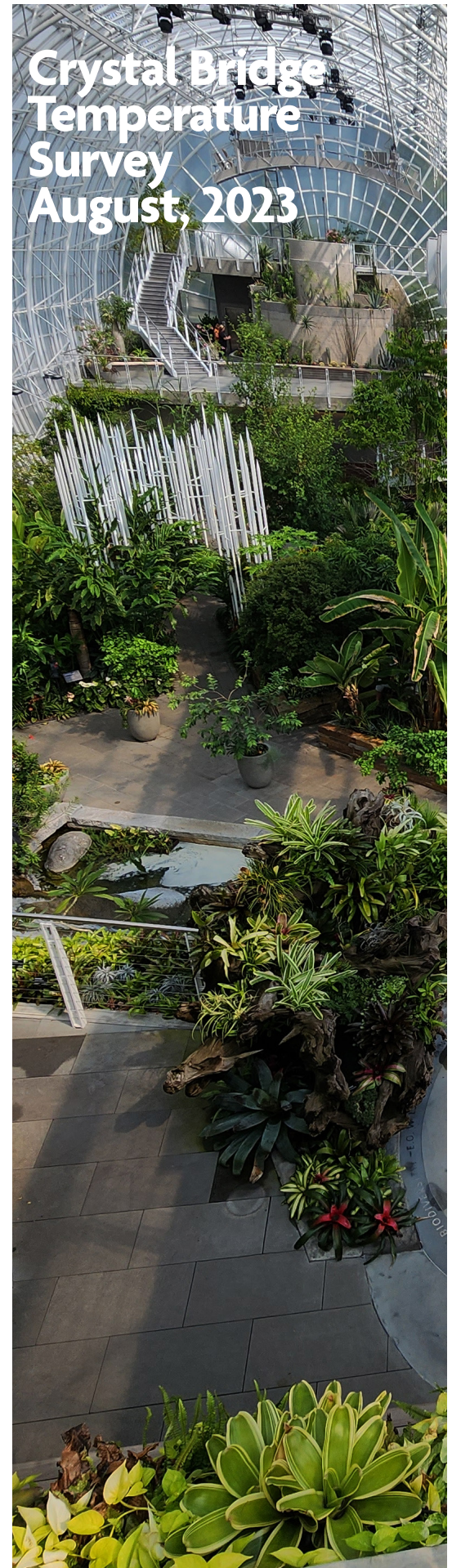
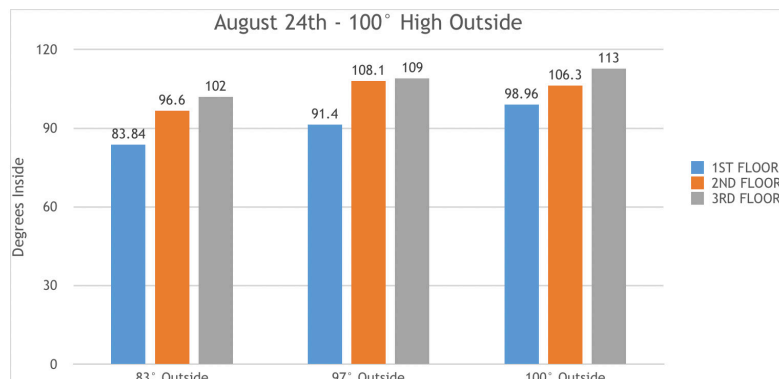
Close to 90° Fahrenheit



Close to 95° Fahrenheit



Close to 100° Fahrenheit



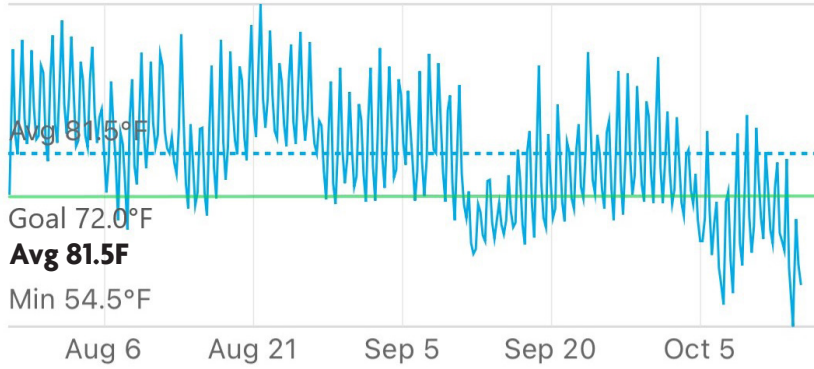
Crystal Bridge Temperature
1st Floor

Temperature Unit

°F

°C

Max 104.7°F



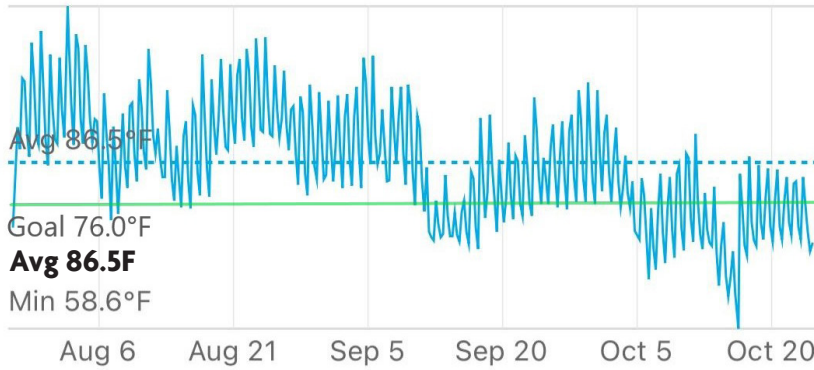
2nd Floor

Temperature Unit

°F

°C

Max 112.6°F



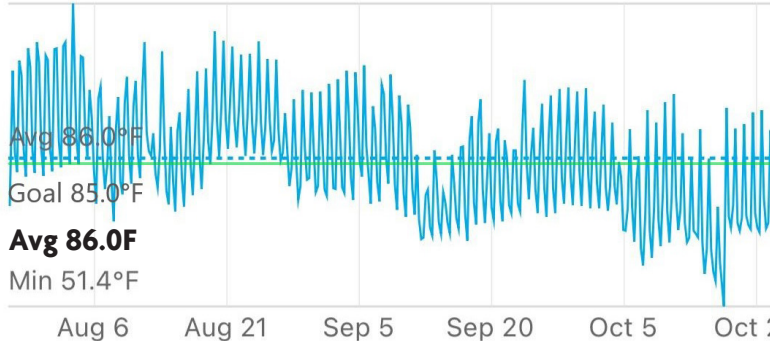
3rd Floor

Temperature Unit

°F

°C

Max 122.0°F



Goal
Temperatures
for the
Summer Months

