A SCIENCE SNAPSHOT

URBAN HEAT IN MIAMI

RURAL   SUBURBAN RESIDENTIAL   COMMERCIAL   CITY   URBAN RESIDENTIAL   PARK   SUBURBAN RESIDENTIAL   RURAL FARMLAND
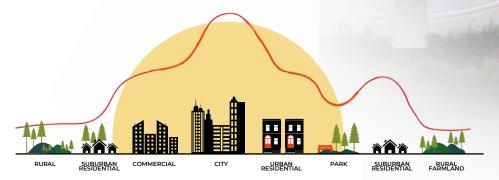
*The science is clear - _studies_ show climate change is making our cities hotter, with significant health impacts on vulnerable populations. Our team of tree experts took a closer look at this phenomenon, known as the **Urban Heat Island effect.***

TRACKING TEMPERATURES IN JUNGLE PLAZA

In 2021, One Tree Planted planted trees in participation with _Five Echoes_, a temporary forest installation in Miami, during Art Basel. After which, all trees were planted at parks throughout Dade County, in partnership with Million Trees Miami.

In the month leading up to the forest installation, One Tree Planted's forestry specialists Tanner Haid and Alaine Ball deployed two temperature loggers at two sites along the walls of the exterior of the installation. Following install completion, one of the sensors from each site was moved to the forest interior with a simple hypothesis – trees in the forest will cool the environment, and lower forest temperatures.

We found planting trees lowered temperatures by up to 6°F in the city of Miami.

Top Left: Jungle Plaza, Miami prior to forest installation.
Top Right: Temperature Logger Placed Outside of forest.
Bottom: Five Echoes Forest Installation.

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A CLOSER LOOK *AT*

TEMPERATURE TRACKING

Immediately after the installation of the temporary forest, our temperature loggers indicated **the forest was 1–6°F cooler than the city around it,** showing a strong correlation between trees and the potential to lower temperatures in urban environments.

TEMPERATURE IN JUNGLE PLAZA DURING FOREST INSTALLATION

OUTSIDE FOREST
INSIDE FOREST

90°F

80°F

TEMPERATURE DROP INSIDE FOREST

70°F

DATE OF FOREST INSTALLATION IN JUNGLE PLAZA

6°F TEMPERATURE DIFFERENCE BETWEEN LOGGER LOCATIONS

60°F

OCT 2021　　　　**NOV 2021**　　　　**DEC 2021**

THE TAKEAWAY

Observing firsthand what science tells us about the benefit of planting urban forests, is a critical step in the global fight against climate change. But the benefits of green space in urban environments go beyond climate impact. Planting trees in cities will improve water and air quality, bolster biodiversity, promote health, support tree equity, and more! **To plant trees in your city, contact us at hello@onetreeplanted.org.**

AIR　　**WATER**　　**BIODIVERSITY**

SOCIAL IMPACT　　**HEALTH**　　**CLIMATE**

ONETREE**PLANTED**