

SPOTLIGHT

CITY FOREST, SINGAPORE



Photograph by Wong Maye-E, AP

Using plants and trees in a unique way, Singapore officials opened Gardens by the Bay this year. The 11-million-square-foot (1-million-square-meter) complex—the size of nearly 250 U.S. football fields—aims to curb the heat island effect while bringing botanical bliss to urbanites.

The centerpiece of Gardens by the Bay is a glass atrium that houses approximately 220,000 types of vegetation, or 80 percent of the world's plant species, according to Singapore's National Parks Board.

Outside the menagerie of plants is a grove of 18 “supertrees”—vertical gardens up to 164 feet (50 meters) tall that capture rainwater, filter exhaust, and are capped with solar panels that provide enough energy to light up the trees at night.

The heat island effect occurs in cityscapes characterized by pavement, asphalt, and concrete—all materials that can absorb warmth.