

ARIZONA

Arizona Department of Forestry and Fire Management



Dangerous heat islands in Tucson, Arizona's south side neighborhoods register temperatures up to 8 degrees hotter than citywide averages and 12 degrees higher than in more affluent well-canopied neighborhoods in the summer. The SOMBRA Project works with a network of community members and local organizations to create urban mesquite tree forests to increase urban canopy and decrease temperatures. These native trees are drought adapted and a food source, increasing the area's resilience in many ways.

With funding provided by the Arizona Department of Forestry and Fire Management's Urban and Community Forestry Program and the USDA Forest Service, The Community Food Bank of Southern Arizona works toward resilient forests and communities with the SOMBRA project, which stands for Sonoran Mesquite Barrio Restorative Alliance and is also the Spanish word for shade.

In collaboration with a network of 12 community organizations, several based in the Tucson neighborhoods most vulnerable to the

impacts of urban heat islands, the SOMBRA Project incorporates short- and long-term planning for the cultivation, growing out, and maintenance of thousands of velvet mesquite (*Prosopis velutina*) bean pod trees. In addition, the project aligns with the City of Tucson's plan to plant one million trees by 2030 and is supported by Mayor Regina Romero's Office.

A core aspect of the SOMBRA Project is ongoing, hands-on training, so that community members have the knowledge and skills necessary not only to cultivate and plant

the mesquite trees but to maintain the trees in public green spaces for generations to come. Training also includes harvesting and milling of mesquite bean pods, which provide a nutritious, protein-dense flour - a heritage food among the Tohono O'odham, Pima, and Yaqui people of the Sonoran Desert region.

The SOMBRA Project directly addresses the lack of tree canopy and climate resiliency on Tucson's south side. The Project takes a long-term approach and anticipates planting more than 20,000 mesquite trees by the end of

2030. Major outcomes from this project's initial phase include the establishment of four new mesquite tree cultivation sites, 16 training sessions for over 300 community members, and the cultivation of over 2,000 seedlings. Once established, the project will see the creation of two additional cultivation sites, a minimum of eight trainings per year, and the distribution and planting of approximately 2,700 trees per year through 2030.



Header: A donated shade structure that will be used at the San Xavier Co-op Farm to grow out mesquite seedlings. Photo: Community Food Bank of Southern Arizona. **Far Left:** A mesquite seedling grown through the SOMBRA project. **Left:** Volunteers plant mesquite seeds in individual containers for germination. Photos: Victor Ceballos