

Food Forest Expansion



Expanding urban agriculture is an established priority for the City of San Antonio as evidenced in the SA Tomorrow Comprehensive Plan, the SA Climate Ready Action and Adaptation Plan, and Metro Health's SA Forward plan. Food cultivation within the city can reduce food insecurity, foster community, and provide environmental services.

What is a food forest?

Food forests are self-sustaining, no-till systems of perennial crops inter-planted in layers to mimic a mature ecosystem to provide food. They are public access for city residents to come harvest, and they require less ongoing maintenance than gardens featuring annual crops.

Proposal

- Integrate food forests into Parks and Recreation and Public Works managed lands, including vacant lots, flood plains, and undeveloped park space.
- Leverage the Natural Capital (NatCap) tool to determine where food forests will make the most significant environmental and equity impacts, and select sites accordingly.
- Plant a certain acreage of additional food forest annually.
- Codify a maintenance regime, either with additional COSA staff/duties, or through specialized professional services agreements.

Background

In 2021, the Food Policy Council of San Antonio partnered with Stanford University's Natural Capital Project to build a tool to determine the return on investment value of urban agriculture within San Antonio for food yield/food access and environmental services. This includes urban heat island, water infiltration, pollination, and access to green space.

Local data was gathered from urban farms, along with cost analysis from the Food Policy Council's Tamox Talom Food Forest, a 3-acre food forest pilot at Padre Park.

Funding

- For capital installation, leverage the Tree Mitigation Fund and federal grants
- For cultivation costs, leverage the Resiliency, Energy Efficiency and Sustainability fund and donors through nonprofits



Considerations

- Fruit and nut trees require additional care for establishment and maintenance:
 - pruning
 - solarizing for weed suppression
 - dripline irrigation and irrigation maintenance
 - compost application
 - harvesting
 - treatment for disease

Options

- Integrate into and expand Parks & Recreation and Public Works landscaping operations
- Contract local, specialized cultivators to conduct maintenance duties.
- Prioritize the lowest-maintenance crops that are well suited for San Antonio

Next Steps

- Identify sites to pilot projects
- Set an acreage goal for expanding food forests annually
- Identify divisions within Parks and Recreation and Public Works to be expanded to facilitate cultivation, or
- Draft scope of work for food forest cultivation subcontractor Professional Service Agreement

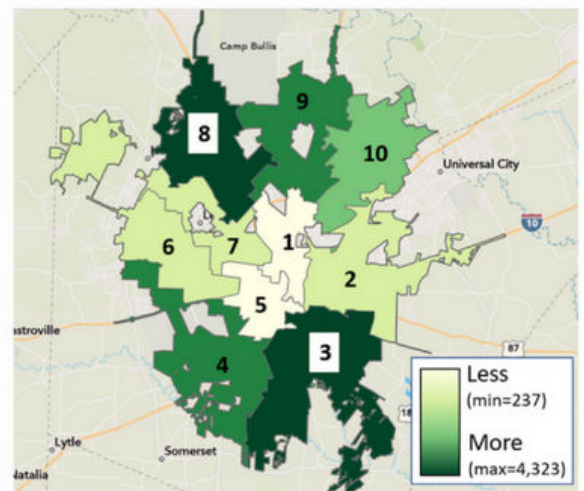
Food crops with demonstrated viability for San Antonio in food forests include figs, pecans, mulberries, mustang grapes, persimmons, plums, prickly pear, agarita, amaranth, and sunflowers, among others.

Potential Sites

San Antonio has a total of 16,800 acres of publicly owned natural areas that could be converted to urban agriculture.

This available space is not evenly distributed throughout the city; Districts 1 and 5 have the least area, and Districts 3 and 8 have the most.

| District | Publicly owned undeveloped open space (acres) |
|----------|---|
| 1 | 544 |
| 2 | 1,021 |
| 3 | 4,323 |
| 4 | 2,178 |
| 5 | 237 |
| 6 | 869 |
| 7 | 687 |
| 8 | 3,607 |
| 9 | 1,914 |
| 10 | 1,420 |



Food forests on these sites could provide:

- 192+ million pounds of food/year (worth \$995M; enough to feed nearly 314,000 households)
- \$3.5M worth of urban cooling services that mitigate the urban heat island
- Additional co-benefits of carbon sequestration, flood retention, and green space access