

## **Breakout Session Edible Tree Conservation**

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### **The challenges include a variety of cultural norms.**

- **Unfamiliarity.** Cultural familiarity makes a difference. For example, while quince is popular in Magdalena, Mexico (where it is important in the local culture), it is unknown to many Tucson residents.
- **Maintenance.** Unused fruits can attract rats, fallen fruit may look unappealing. Some people might not even like seeing leaf litter under trees. Maintenance can also be an issue when the guiding teacher behind the school garden moves on.
- **Aesthetics.** Some people might think edible gardens look messy, “funky.” Manicured lawns hold a certain place in our national psyche, and neat gravel is favored in the minds of many Tucsonans.
- **Exotics.** Any non-native plant is viewed as an invasive species by some people.
- **Water use.** Gravel is seen as good because it avoids the need to water plants. People are not accustomed to considering the cooling service done by plants.
- **Liability.** This is a big one. Potential liability for injuries incurred during gleaning is a concern for property owners, and government managers of public land. Right now, governments and agencies often restrict gleaning from trees. In many places, it's illegal to harvest from public parks so the fruit collector theoretically could be arrested if someone complained.

### **Many of the solutions identified involved outreach in various forms.**

- **See neighborhoods as orchards.** Share the bounty. Have community potlucks. Neighborhood associations, homeowner associations could be good partners in a project. Work with groups, respect the local cultural norms – what would the neighbors like to see in the neighborhood project? Encourage neighborhood groups to express themselves.

- **Consider partners.** School districts may also be important participants. Some of the local districts opening up include Tucson Unified School District, Sunnyside, Flowing Wells, and Marana. Other groups working in this arena include the Community Food Bank, whose gardening workshops fill up fast; Native Seeds Search, which has a three-month seed-sowing program to “train the trainers,” including how to plant a tree. The Sonoran Desert Museum features some efforts in harvesting native fruits. On the City of Tucson side, perhaps “institutional orchards” can start with Parks and Recreation, which has more flexibility than many other city departments.
- **Collect and share data.** Perhaps a program could be modeled along the lines of the “rainlog” website, where citizens can report the precipitation levels in their backyards. For another good example, see the Mountain States Nursery information site, which describes how different plant stocks fared in different microclimates. Mission Gardens also is collecting data on growth success of different varieties planted in different climatic locations, with climate varying by elevation as well as latitude.
- **Hold public and private feasts.** Public would include Tucson Meet Yourself, other festivals associated with food (Folk Festival?). Consider more festivities along the lines of the Dunbar Springs Mesquite Pancake Breakfast hosted by Brad Lancaster and neighbors. Superior Arizona recently had its first Prickly Pear Festival. Maybe it's time for a Pomegranate Festival. As possible, support neighborhood potlucks involving local edibles.
- **Bring workshops around the state.** Work with cultural norms, knowledge. Combine the availability of appropriate seeds and cuttings of plants that can grow locally with workshops on how to use their fruits and vegetables and seeds. Also cover planting and maintaining available plants. Perhaps work with Cooperative Extension Master Gardeners on this?
- **Consider introducing edible/native guilds in small doses.** Perhaps 5% of the landscape could be an initial goal, so people can adjust to “messy” look of multi-tiered cultivation (e.g., plants in “vertical” layers, species selection based on local conditions across a varied landscape rather than monocultures in a straight line).
- **Enlist restaurants to use some of the locally grown food.** Ask them for ideas on what foods would be useful on a seasonal basis. Tucson Originals, El Mercado vendors, any restaurants interested in local produce could participate.

- **Think of edible trees in health/welfare context.** Food security is a national concern, especially in the context of climate change. Safety and welfare approach is particularly apt when it comes to concerns about how concrete and pavement heat up cities, a phenomenon known as the urban heat island effect. Trees act as swamp coolers and provide shade – a way to mitigate some of the extra heating from development.
- **Put water use in the context of health and welfare.** Trees are a mover of water, which helps cool the environment. Remind Tucsonans that trees can cool the local air temperature by roughly 6 or 8°F via evaporative cooling, and keep the ground surface up to 40°F cooler via shade. Whenever possible, favor water harvesting techniques to support edible trees, including shaping the landscape to benefit plants, and collecting rooftop water in cisterns for later use. Also make people aware of the possibility of reusing grey water discarded from washing machines and other safe household sources.
- **Favor native species even in edible projects.** When it comes to considering the issue of exotic species, one rule of thumb may be to try to keep roughly 80% of the cultivated landscape in native plants. This is why teaching people to appreciate and enjoy the flavors of native plant fruits, roots, nuts and other edible parts is an important part of working on cultural norms. At the same time, explain how food security issues support the inclusion of some non-native species for food purposes, favoring subtropical species adapted to dry climates. A changing climate might also require some shifting of species.
- **Work with different levels of government, agencies on improving gleaning policy.** Government entities would need to provide access to edible trees or other plants. Right now, it's illegal to harvest (glean) in many public parks. Governments and agencies often restrict gleaning from trees; the Bureau of Land Management is the only agency mentioned that sometimes allows harvesting – and even then for personal use only. Gleaning is not allowed even then for commercial purposes, which has the potential to limit interest. Tribes are able to get permits in some national parks but even that is tough.
- **Seek broad liability coverage to encourage gleaning.** Potential liability for injuries incurred during gleaning is a concern for property owners, including government ownership of public land. Is there a way to get general liability coverage so that citizens could be collecting fruit without the entity risking litigation?