

KINO HERITAGE FRUIT TREE PROJECT

The Kino Heritage Fruit Trees Project began in 2003 as a creative effort between researchers at the Arizona-Sonora Desert Museum, University of Arizona, National Park Service, and other Tucson area organizations. Their goal was to identify, locate, collect, propagate and replant the fruit tree stocks (cultivars) first introduced in the 17th through 19th centuries by Jesuit and later Franciscan missionaries, including Father Eusebio Francisco Kino. Their impetus was the opportunity to undertake planting of these historic species at the Tumacacori National Historical Park and the Mission Garden at Tucson Origins Heritage Park.

To quote the the manager of the project, Jesus Garcia, *The first task of the project was to identify fruit trees from the Spanish Mission Era (Table). This was accomplished by reviewing father Kino's accounts, 49er documents and journals, and the work of contemporary local ethnobotanists and horticulturalists to trace the legacy of these fruit trees. By some accounts, trees included peach, quince, pear, apple, pecan, walnut, fig, and pomegranate. Together, they made up a portion of the mission community's agricultural livelihood that also depended upon grape vineyards, grain fields, vegetable and pharmacy gardens, as well as livestock.*

The goal of the research is to identify stocks, not individual trees. Only a few of the trees (fig, pomegranate, quince) are long-lived (80-100 years), while most live no longer than 20-40 years. So old trees that can be traced back to stocks introduced or assimilated 150-300 years ago are sought. Thus far stocks have been identified in mission orchard communities in Sonora (Mexico), on the campus of the University of Arizona, at Quitobaquito Springs in Organ Pipe Cactus National Monument, historic houses, and in backyards of private residences.

If you have information regarding old stocks of fruit trees in southern Arizona, New Mexico, southern California, or Sonora (Mexico), or would like to know more about this project, please contact Jes's García (phone 520-883-3089, email jgarcia@desertmuseum.org)

The enthusiastic efforts of the Kino Heritage Fruit Trees Project have resulted in the successful propagation of a wide variety of heritage trees. The Kino Heritage Fruit Trees are now commercially available at Desert Survivors Nursery in Tucson (see Resources on the back of this brochure).



RESOURCES ON KINO FRUIT TREES AND URBAN FORESTS

Information on the Tucson Historic Preservation Office's Arizona State Forestry and Urban & Community Forestry Program, Community Forestry Assistance Program grant

<http://cms3.tucsonaz.gov/preservation/leaf-workshop>

Information on Kino Heritage Fruit Tree Program

<http://www.desertmuseum.org/center/kinofruittrees.php>

Source of Kino Heritage Fruit Trees

<http://www.desertsurvivors.org/Nursery/KinoTrees.html>

Source of free native and drought-tolerant trees

<http://www.tucsoncleanandbeautiful.org/trees-for-tucson/low-cost-shade-trees/home-shade-trees-top-customers/>

Certification program in urban forestry

<http://www.tucsonbotanical.org/education/shady-deals-get-certified-in-urban-forestry/>

ACKNOWLEDGEMENTS

Funds for this project were provided by the Urban and Community Forestry Financial Assistance Program administered in cooperation between Arizona State Forestry and Urban & Community Forestry Program and the USDA Forest Service.

Special thanks to Friends of Tucson's Birthplace for managing Mission Garden and conducting the Kino Heritage Tree Planting in the Spanish Colonial Orchard



Kino Heritage Fruit Tree Planting at Tucson's Mission Garden Spanish Colonial Orchard



Quince (membrillo) flowers and fruit. One of nine species planted at Mission Garden





Mission San Agustin ca. 1810. Illustration by Paul Mirocha based on digital reconstruction by Doug Gann

THE VALUE OF THE URBAN FOREST

You can enjoy the fruits of your efforts by planting Kino Heritage Fruit Trees and an abundance of other trees in your own yard. Native velvet mesquites, desert ironwoods blue palo verdes, and foothill palo verdes grow readily in the Sonoran Desert with little supplemental water.

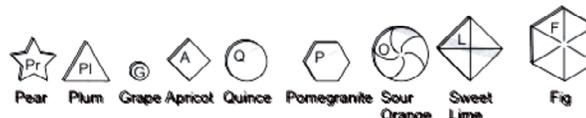
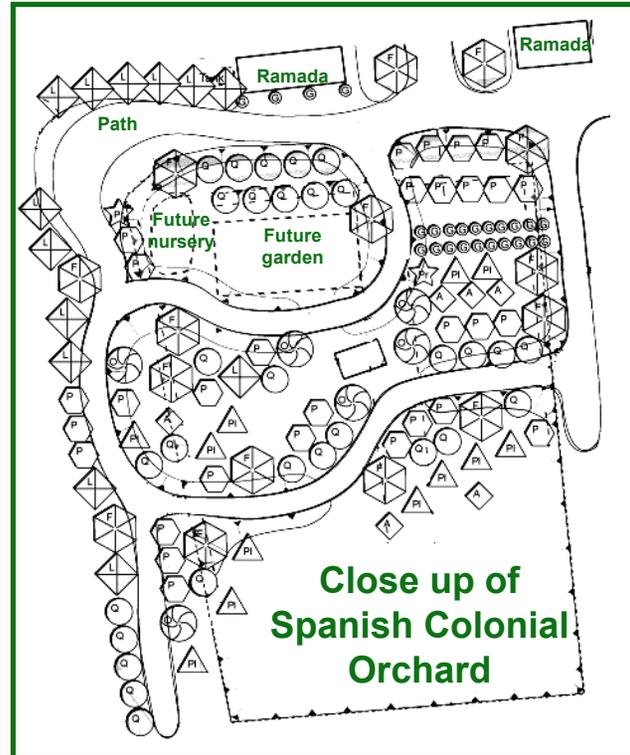
The Spanish Colonial Orchard at Mission Garden, and other urban forests—including the trees in your own backyard— benefit you and your community by:

- Providing welcome shade for your comfort
- Reducing the heat island effect for the community
- Supplying healthy locally available food
- Creating habitat for birds and other wildlife
- Beautifying the urban environment
- Adding nutrients to the soil when leaves drop
- Putting rainwater to beneficial use when planted in water harvesting basins

PLANTING LIST

The planting key is shown at lower right. The plan includes:

- 2 pear
- 12 plum
- 24 grape vines
- 6 apricot
- 30 quince
- 30 pomegranate
- 6 sour orange
- 13 sweet lime
- 15 fig



SPANISH COLONIAL ORCHARD PLANTING PLAN

The City of Tucson Historic Preservation Office received a grant in 2010 from the Arizona State Forestry and Urban & Community Forestry Program, Community Forestry Assistance Program. With the assistance of this funding, the City was able to work with the Pima County Natural Resources Parks and Recreation Department and the Friends of Tucson's Birthplace, to enter into an innovative agreement to undertake on-the-ground planting at Mission Garden.

Tree planting was conducted in February and March 2012. Upon completion, 138 Kino Heritage Fruit Trees and Grapes, of nine different species had been planted in the northeast area of Mission Garden. This historical recreation of a Spanish Colonial Orchard illustrates the diversity and interspersed, healthy array of plants found in historical missions. In addition, it incorporates creative land-shaping to harvest rainwater in order to reduce the need for irrigation of the plants with drinking water.

Friends of Tucson's Birthplace, a neighborhood-based not-for-profit organization has undertaken management of Mission Garden. FOTB helped develop the planting plan at left, and organized and led the effort to plant the Kino Heritage Fruit Trees and Vines. The new plants are thriving and are sparking a renewed interest in Mission Garden and the Tucson Origins Heritage Park. Contact FOTB for more information about Mission Garden, and to join in celebrations, planting and stewardship activities at Mission Garden. <<http://www.tucsonbirthplace.org/>>

