



# **TUSD**



THE UNIVERSITY  
OF ARIZONA

# **Ecology Sustainability Program**

*-Biodiversity*

*-Culture*

*-Climate*

# 2014-2015 Program Highlights:



# AzDHS School Garden



[HOME](#) [BLOG](#) [CALENDAR](#) [ABOUT US](#) [ISSUES](#) [RESOURCES](#) [ADVERTISE](#) [SUBSCRIBE](#)

[POLICY](#)



## More Salad, Please!

*School lunches get a much-needed makeover with a little help from school gardens and new nutritional guidelines.*

BY MERRILL EISENBERG | PHOTOGRAPHY BY MOSES THOMPSON

# Pipeline Development:

- Manzo Elementary
- Mansfeld Magnet Middle School
- Tucson High Magnet School



# Expanded Impact: *Beyond the Pipeline*

YOUTH

## Rise of the Clones

*Through a partnership between Mission Garden and TUSD, students are learning how to clone heritage fruit trees, connecting past to present.*

BY LILI DEBARRIERE | PHOTOGRAPHY BY MOSES THOMPSON

WHEN I ARRIVE at Roskrige Bilingual K-8's spacious campus, Moses Thompson is tending the campus's fruit trees—quince, fig, pomegranate, and grape. The trees are clones—exact genetic copies—grafted from cuttings from Mission Garden, and they provide lush shade for the school's vegetable garden and chicken coop.

This is ground zero for a new generation to learn and experience the history of the Sonoran Desert. Students are learning not only how non-native plants arrived in Baja Arizona, but also how to clone and plant fruit trees adapted to our desert climate. Eventually, they'll get to taste the fruits of their labor, trying the heritage breeds that grow from cloned trees.

Thompson works as a school garden and sustainability program coordinator, a joint appointment between the University of Arizona and Tucson Unified School District. After heading the pilot program for the Mission Garden fruit tree cloning project at TUSD's Manzo Elementary, he took the trees to Roskrige.

"Little time machines" is what Thompson calls the trees, as every cultivar is a direct descendant from the oldest living cultivars from the Spanish Colonial period in the 18<sup>th</sup> century.

"It's not just about preserving the genetic heritage of the trees; it's really about preserving the heritage of a community," says Thompson. Between Manzo and Roskrige, the students will clone 480 cuttings this year. A handful of the cuttings will be

planted on school grounds, while some will go home with students to plant in their own backyards. The rest will be returned to Mission Garden to expand the orchards and vineyards of this cultural heritage park that demonstrates more than 4,000 years of agriculture in the Tucson Basin.

"The value is to tell the story behind the plants," says Jessica Garcia, who works as an education specialist at the Arizona-Sonoran Desert Museum and volunteers at Mission Garden. He calls the garden an "outdoor laboratory for children and adults to learn about their cultural heritage."

Garcia says that his role in the TUSD-Mission Garden collaboration has been telling stories, "especially stories that span the border, to bring those traditions back, to bring what is happening south of the border, as a kind of cultural broker," he says. "Across the border these traditions are still very much alive. We are trying to revive, reconstruct, what Tucson used to be 100 years ago ... to pass it on over here." Garcia is also collecting oral history stories about the heritage fruits, including recipes and information about how to prepare and store them.

The seed for the fruit project was planted in 2010, when Garcia paid a visit to Manzo Elementary to check out Thompson's project cloning native shrubs for habitat restoration. As

*From pick to grow, student Mircea Barbat shows how a little TLC, a cutting becomes a clone of a heritage fruit tree.*



# Moving Forward: 2015-2016



# Acknowledgements:

- TUSD Leadership and Governing Board
- TUSD Food Service
- UA College of Social and Behavioral Sciences
- UA College of Science
- UA Graduate College
- Biosphere 2
- Agnese Nelms Haury Program in Environment and Social Justice
- Zuckerman Family Foundation

