

Report of Hank Verbais, Pima County Master Gardener, August 8, 2021  
Following a site visit at Stone Curves on Monday, July 19

Having researched your gardening issues, here is our recommendation:

Dear Eloisa and all you other plant lovers, Mea Culpa, Mea Culpa! I'm sorry this is so late but here is the final report from my visit to your complex. So, not in any particular order, here are my observations and recommendations.

Overall, I saw no significant presence of insect damage or the presence of any pathogens (bacterial or viral infections) or the presence of observable fungi. I did see some leaf damage on a few broad leafed plants due to activity of leaf cutter bees. Leaf cutter bees use the leaf material to pack their nests. The perfectly half circular pieces they remove will not damage the plant in any way.

One of the questions that came up was about figs and whether or not they should be fertilized. I'm attaching a really good UofA publication on figs. Page two has a paragraph on fertilizing. The basic answer is that fertilizing is not necessary in most desert soils but to be sure, the pub recommends that your soil be tested. Based on the health and vitality of the figs I observed, I don't think soil testing is necessary in your location. Will it hurt to fertilize (follow the recommended application rate in the pub!)? Probably not but you can experiment by fertilizing a few and leaving a few others untreated as a control and see if there is a difference in fruit production. Of course you need to make sure that other variables, especially irrigation, are the same for all the trees.

We talked a lot about pruning and when and how to prune. I think the folks doing the pruning now are doing a pretty good job, especially considering that some of the trees and shrubs have overgrown the location in which they were installed. Remember the basic pruning rules: Make sure the location chosen will accommodate the mature size of the plant. Pruning is defined as removing parts of a plant for a purpose and the 4 Ds of pruning: prune if a limb is dead, dying diseased or dangerous. I already forwarded to you the names of two certified arborists who

can provide guidance on pruning. Your group pointed out the one mesquite that is leaning and the mechanism that was installed to measure the angle of the lean. I recommend that you monitor this tree to make sure it doesn't continue to lean. Juan Barba is a consulting arborist, Jason Eisenberg owns REALM Environments. Both are well respected. Let me know if you still need help with the arborist question.

One question had to do with the native Range of the Palo Blanco tree ((*Mariosousa willardiana*). Hot, rocky slopes south of Hermosillo, Sonora is the short answer. Check out <https://arboretum.arizona.edu/mariosousawillardiana> for more info. It is a pretty common landscape tree and is ideally suited for tall, narrow, spaces with good sun exposure. Water as you would any other Sonoran desert tree.

We had another discussion about what I believe is a Mexican Ebony (*Havardia mexicana*) and why the bark was peeling and why it was basically leafless. We talked about the possibility of some kind of insect damage but a week or so ago, I received a photo from you all showing the tree in full foliage. Thinking maybe the tree is drought-deciduous, I did some research but could find nothing suggesting that it is. Again, check out the UofA campus arboretum website for great info on this tree, including irrigation needs (monthly!).

A big topic of discussion was the reason for the desert willow die-off. After extensive research and consulting with people way more knowledgeable than me, I haven't really come up with a good answer. I don't think it is a pathogen or bug issue and I'm leaning more towards an irrigation issue. Check out this really good website, horticulture unlimited, inc. ([horticultureunlimited.com](http://horticultureunlimited.com)) While this is not a university site, I have come to rely on the information and have found it to be very helpful. Just search for desert willow in the site's search box. The web site describes the tree's native range and care requirements.

Ok, so at last we come to the BIG QUESTION - how much water do desert native and desert adapted plants need in an urban landscape setting? In order to stay healthy and maintain their

vigor throughout the year, all plants in an urban landscape should receive appropriate water. I know we talked a lot about this during our wrap up meeting but here is a short summation. Depending on how much rain we get during our two rainy seasons, the mature desert legumes (mesquite, palo verde, acacias, etc.) may not need any supplemental watering. This answer is a fudge between the no water position and the regular water position. Taking the last 30 to 40 days as an example, your desert legumes probably received enough water to get them through to winter. On the other hand, if it turns very hot and very dry again as it sometimes does in late August and through the first part of October, they will benefit from another deep soak. I could sense that some of you were a little frustrated by my lack of a direct answer during our wrap up meeting (although I think I finally did give you a definitive answer!) I'm probably doing the same thing here. I know some of you are opposed to giving any supplemental water but my recommendation is that you give several deep, slow, thorough soaks at least 2 times per year - once in our fore summer (May and June) and once prior to winter rains. With only scant winter rain, you should think about another deep soak in early spring. I think this matches what I said during our meeting. While it is true that native legumes can and do survive on natural rainfall in nature, your complex is not "in nature" and I think all of you agree that you chose your residence based on the setting. To keep it looking healthy, vibrant and alive, proper irrigation must be applied.

One of the basic irrigation requirements to remember, especially for shrubs and trees, is to water the entire root zone, where possible, at the drip line or edge of the canopy and a little beyond. Make sure the water reaches deep enough into the soil to reach the roots which, for mature shrubs and trees, is between 2 feet and 3 feet.

OK, I think this wraps it up. I have included the three publications promised, answered all the topics that we discussed during my visit and addressed the watering issue.

I enjoyed meeting all of you and I thank you for your interest in this subject and your hospitality.

If I missed anything, please let me know and let me know if I can clarify any of my answers.

Thank you all!

Hank Verbais, master gardener

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<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1636-2014.pdf>

<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1298-2017.pdf>

<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1429.pdf>

We appreciate you reaching out to us and hope that this answer helps you maintain a healthy, happy garden.

Should you need to follow-up on this answer, please call us at 520-621-0948. During the COVID-19 issue, our physical plant clinic is closed but we're still responding to voicemail.

While we have you here, would you consider taking a short survey to provide us with feedback on our service? If so, please click on the link below. It will only take a minute and it will help us evaluate and fine-tune our service to Pima County gardeners.

Thank you,

Hank Verbais

Pima County Master Gardener