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Warren Roberts, superintendent of the UC Davis Arboretum for 37 years and superb storyteller, leads monthly walks September through June. He examines a valley oak; the acorns were part of his diet growing up as a sixth-generation Californian.

## Warren Roberts, an Arboretum superstar

Did you take in a Walk with Warren this year? That's Warren Roberts, superintendent emeritus of the UC Davis Arboretum. Well, if you didn't, you are out of luck until September or October. But there are other activities at the Arboretum all summer.

Warren, superintendent for 37-plus years, has been leading a monthly walk in parts of the Arboretum since before he retired. He is a superior storyteller. You ask him about a tree and he has one fascinating story leading into another.

On one walk, in the oak tree grove, he had told a story about a tree insect that produces a sweet substance that can be used to make candy. There is a chestnut-leaved oak, *quercus castaneifolia*, that grows in the Shields Oak Grove. Native to the Caucasus and Alborz mountains of Iran, it is the fastest-growing oak after our valley oak. It has excellent wood and is used for timber.

His candy from oak tree story: *In its native habitat, it has a mealy bug that lives on it — sort of like an aphid with a very woolly coat — and that insect, when it hooks onto the part of the tree that carries the fluids up and down ... it gets*



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The UC Davis Arboretum waterway, a remnant of Putah Creek, is a place for reflection.

*more than it needs and so ejects some of the sugary material. In your own garden you might see aphids and sooty mold, that's the honey dew as it's called that's been attacked by fungi. But it collects in the woolly part of these insects and so you can take your finger and get some (sweetness) by just touching this particular creature.*

*It was long ago that people learned that this could be made into a candy. So people go out and scrape the mealy bugs off of these twigs and gather them and put them into a double boiler so that the water gets hot, but not to the boiling point. So that gets the sugar into the watery solution plus some of the protein from the insect, and this is strained and cooked down and you make a nougat of this. Usually*

*you think of sugar and egg white ... but the egg white part is taken care of by the protein from the insect and the nougat is made ... — sort of a soft, chewy candy — and traditionally pistachio nuts are added to it, which come from the same part of the world, and rose water. This is the most delicious thing and it has the name Gaz ... (a Farsi word that means) gal or girl, probably related because Iranians speak a language related to English. It's not an Arabic language at all.*

*And then that is typically made into little cakes, about 2½ inches across and about less than a half-inch thick and then it is stored in flour and you can ship it around. I had a roommate from Shiraz, which is in the southern part of Iran. And his folks used to send boxes of this stuff. And, oh! It was so delicious. It's kind of like divinity but with a rose flavor and you can get it here in Davis at the International Food Market in Davis Manor, East Davis. Ask for Gaz. It's wrapped in little papers. It is made with egg whites so people (who) are squeamish about ... where eggs have been would be squeamish about that too. Nonetheless, it's delicious and has come from a tree.*

*That story was from my roommate ... He knew the Iranian oak and the oaks we have. Thank goodness we don't have the mealy bugs (in the Arboretum).*

Warren's story led into one about a scrub oak from the Mediterranean that has another kind of mealy bug, which produces a red dye that was the main dye for the Roman empire, medieval

Europe and so on. Gradually, the Spanish adopted that red dye but with the conquest of Mexico, a much better insect was found for red dye — that's the cochineal on prickly pears. The name cochineal is depreciative for little pig. When they dry, they look like little black pigs.

Warren is familiar with the products of our own native oaks. On his mom's side, there were Native Americans. His grandmother used to make muffins and sheet cake from acorns. You gather them, crack

open the shell and have to get the brown skin off the cotyledon because that's very bitter. Then the seeds are ground and leached. You put them in a colander and keep pouring scalding water over them until it no longer tastes bitter. Then his mom and grandmother would toast it in ovens and then grind it again

and they would add it to the recipe and use it instead of bran in muffins.

Warren was interested in plants from the time he was 3. His grandparents and great-grandparents were interested in plants. His great-grandmother was a gringa but was a healer. She was born in the Sierra foothills in the 1860s and learned about herbs. She used yerba santa, which was used to treat tuberculosis. The leaves taste sweet so, when you are hiking, you use the shiny leafed species and it keeps your mouth from drying out. She also used creosote bush to make a poultice to treat arthritis.

The Arboretum had been discontinued when Warren came to run it in 1972. He was hired to re-establish it. He was hopeful when he met devoted volunteers Pat Miller and Nancy Crosby, who were painting a building, and those volunteers are still working today, 40 years later.

Year-round, the 3.5-mile Arboretum loop is a delight of surprises, free, 24 hours a day. In the summer, it's best to visit early in the morning or later in the day. Google UC Davis Arboretum and click on Plan Your Visit for maps, directions, parking information, to find out what's in bloom, special events, tours, folk jam sessions, birding and the like. I recommend the very accessible west end if you only have time for a short taste.

— Jean Jackman is a Davis resident. Her columns appear monthly. Got a story, question, comment, correction? Contact her at [JeanJackman@gmail.com](mailto:JeanJackman@gmail.com)



JEAN JACKMAN AT THE POND