



# SUFA E-News

## Fall 2023



Welcome to the Fall 2023 issue of the Sunnyvale Urban Forest Advocates (SUFA) newsletter. This quarterly newsletter will keep you informed about how you can participate in SUFA's efforts to increase the tree canopy in Sunnyvale through education, tree plantings, and advocacy.

### SUFA 2023 Highlights

As part of Earth Day activities in Sunnyvale SUFA set up information tables at the Library and also at Homestead and Fremont High Schools. SUFA gave an on-line presentation to Livable Sunnyvale and an in-person talk about the urban forest at the Senior Center.



**Educate**

SUFA held 14 Tree Walks during the year including our first walk at the Community Center in partnership with the Senior Center and our first family-friendly tree walk geared to 5 - 10 year-olds at Serra Park. It was also the second year for our increasingly popular edible tree walk.



Two new self-guided tree walk maps were added to our website: the Community Center and De Anza Park.

**Advocate**

SUFA members spoke at meetings and wrote emails in support of:

- the Cherry Chase Natural Areas Project
- the "Street Tree Repopulation with an Equity Lens" study issue



In addition to speaking at council meetings, SUFA volunteers spoke one-on-one with six of our seven city council members to discuss the importance of trees in mitigating climate change and improving the health of the Sunnyvale community. Council members were urged to meet the urban canopy goals as outlined in the Climate Action Playbook and the Urban Forest Management Plan.

SUFA was present as students planted five crepe myrtle trees at Cupertino Middle School and ten flowering cherry trees at Braly Park.

**Participate**

The Branch Out Sunnyvale program, organized by SUFA in conjunction with the City and Our City Forest, concluded following the planting of 34 low-cost trees on private property.





## Family-Friendly Tree Walk

Hello fellow kids (and grownups, too!), I was lucky enough to join SUFA's first Family Friendly Tree Walk with my dad at Serra Park on September 16th. It was a bright Saturday morning and I was excited to know more about the trees I see everyday at Serra Park. Soon, I was joined by other kids with their parents. Before we started the tree walk, the SUFA team shared with us the importance and benefits of trees. I thought I knew all the benefits of trees but it surprised me when I learned trees also provide medicines. Then, we started our tree walk.

Our first tree was the California coast redwood - it was a huge tree! It's like a 5-story building. Afterward we did an experiment. Green cones of the redwood tree were placed in a cup of clear water. After a few minutes, the water turned red like magic! Later, I learned that redwood trees have tannin which makes them red. It is a chemical that protects the tree from insects and fire and I learned that's how they live so long. We touched the bark and we did a tree rubbing and I found a beautiful pattern in the tree bark. Then, we formed a huge circle while holding onto a large rope. We moved further and further backward until the diameter was about 20 feet. We were told this is how wide a California coast redwood could grow! I was amazed by how big the trees could grow, and we were just on the first tree!

SUFA then shared with us information about the sycamore tree. It's a native tree, which means the tree has been in California for a very long time and is thriving. The western sycamore can also grow to be a 100 feet tall. I learned 100 feet tall means you'd have to stack five full-grown giraffes on top of one another! I couldn't believe how tall that was! As we felt its bark, some patches of the bark were rough and others were smooth. We had another fun activity in which we got to make patterns with the leaves. Soon, all the leaves of the sycamore tree will fall down. I learned that the sycamore is a deciduous tree. The tree will lose all its leaves in the fall which was surprising because the leaves were still green.

I was not expecting a strawberry tree in Serra Park but there is one! I learned that the tree sheds its bark on the trunk and branches! The strawberries from the tree are not the type my Mom buys at the grocery store. The strawberries my Mom gets have seeds on the outside. I learned that the strawberry tree here at Serra Park is different, the fruit has seeds inside of the fruit. Then, a strawberry fruit found on the ground was cut open! We saw that the inside of the fruit is a white to golden color with a soft jelly-like consistency. It was amazing to see what's inside the fruit.

***Continued on next page***

SUFA shared fun facts about seven different trees that day. There were a bunch of fun and exciting activities along the way. I want to tell you more about the trees I learned about and the leaves and bark and other things we were able to take home (those that we found on the ground) but I will not spoil the fun and let you experience the happiness I felt when I joined this tree walk. I heard the next Family Friendly Tree Walk will be in Fall. I hope you can experience how awesome it was and I can't wait to attend again and I will see you there!

XOXO,  
Samuel

Ps: I hugged a tree today and told Mr. Tree "thank you for being a great tree"!

## Why Do Trees Change Color and Drop Their Leaves?



Trees with leaves that change color in the fall are called **deciduous** trees. This is part of the natural process of **senescence**, which refers to the aging and maturation of plant tissues, particularly leaves. The phenomenon is primarily triggered by environmental cues. Most of the year, these leaves are green because of the **chlorophyll** that they use to absorb energy from sunlight during **photosynthesis**.

As the season changes, temperatures drop and days get shorter. Trees get less direct sunlight, and the chlorophyll in the leaves breaks down. The lack of chlorophyll reveals yellow and orange pigments, called **carotenoids**, that were already in the leaves but masked during the warmer months. Darker red leaves are the result of a chemical change: Sugars that can get trapped in the leaves produce new pigments (called **anthocyanins**) that weren't part of the leaf during the growing season.

The best colors are produced when the weather is sunny, cool and dry after a wet winter. Places that are cloudy, damp, or warm won't see the same degree of changing color.

As the weather turns, trees start building a protective seal at the base of the leaf stem (petiole). This process is known as **abscission**. The tree seals off the area where the leaf was attached, and the leaf, no longer receiving fluid from the tree, falls off.

The vibrant colors and falling leaves are not only a visually stunning aspect of Fall but also serve a practical purpose for trees, allowing them to go dormant and conserve energy and resources during the winter months when photosynthesis is less efficient or not occurring.



**SUFA: Thank you for being willing to be interviewed by Sunnyvale Urban Forest Advocates. First, can I get your full name?**

**Shumard Oak:** Well, Howdy! I'm happy to share with y'all. My fancy dan Latin name is *Quercus shumardii*, but I'm known in these parts as a Shumard oak.

**SUFA: Well, I know that *Quercus* means oak, where does the Shumard come from?**

**SO:** Well, my species was named in honor of Benjamin Franklin Shumard, the state geologist of Texas way back in the 1860's.

**SUFA: You seem to have a bit of a drawl. You're not originally from around here, are you?**

**SO:** Oh, bless your pea pickin' heart, you caught me. No, Shumard oaks are native to the south, mid-west, and also eastern Texas which is where I hail from.

**SUFA: We interviewed a scarlet oak here in Sunnyvale last fall who said they are often confused with you.**

**SO:** Oh, goodness, yes! We're kissing cousins - both members of the red oak subgenus like the pin oak and the red oak. We're really hard to tell apart in family photos.

**SUFA: You look pretty small compared to some of the other Shumards I've seen in Sunnyvale.**

**SO:** Yes, indeedy! I am a young 'un, about 8 years old or so. We start out in a pyramid-like shape but I'm a-fixin' to eventually be close to 80 feet tall and have a big, rounded canopy.

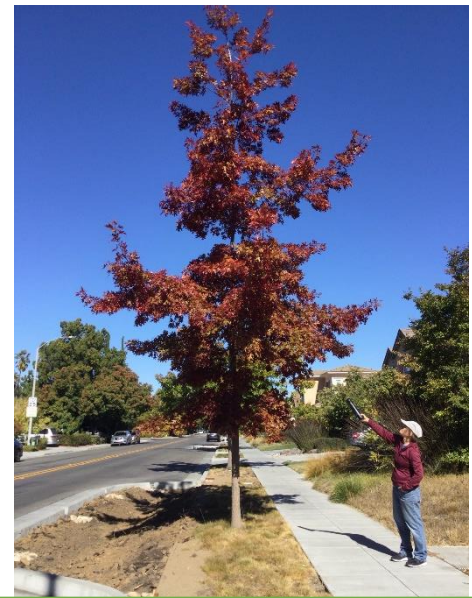
**SUFA: Shumards are often used as a street tree. Do you folks have other uses.**

**SO:** I reckon we do! Our wood is valued commercially for lumber, cabinets, flooring, trim, and furniture. Now that I think about it, makes me glad to be a street tree...

**SUFA: I'm seeing more and more Shumard oaks as street trees in Sunnyvale. What makes you such a good tree for the urban environment?**

**SO:** Well, we're pretty fast growin', tolerant of drought conditions, most soil types, and air pollution. We stand up to short term floodin' and high winds. Oh, and with all those attributes we also come the added bonus of lovely fall colors.

**SUFA:** Okay, lastly, here's rather a tough question for you. There are a growing number of people who believe that cities should plant many more trees native to their local area because of the increase in habitat that creates for local birds, insects, and mammals. Your thoughts?



## Tree on the Street Interview: The Shumard Oak

*Continued on next page*

**SO:** Well, that's a valid point and a good question for the tree powers that be. As for me, I just have to do what the ol' sayin' says and "Grow where you are planted". I reckon' I'll just try to do my best right here

**SUFA:** Well, thank you so much for your time. Good luck and Happy Fall!

**SO:** Well, thank you kindly. It was a pleasure shooting the breeze with you.



*A mature Shumard oak tree with rounded canopy (bottom) and some of the 56 newly-planted Shumard oaks lining both sides of Olive St. by the Library and City Hall. (top)*



## To Prune or to Trim: What's the Difference?

Pruning and trimming are used to control the structure of a tree or shrub. The techniques of tree trimming and tree pruning might look similar, but there are key differences: the purpose and the timing. The goal of both trimming and pruning is to keep your tree healthy and beautiful.

### Trimming

The main purpose of tree trimming is to enhance the appearance of your trees and improve your total landscape. Trimming helps control overgrown branches and maintain the shapely growth of your plants. Trimming helps boost the proper growth of a tree, as the extra branches and overgrowth can prevent trees from getting their necessary moisture and nutrients.

### Pruning

The purpose of pruning is to remove infected, diseased, or dead branches of a tree that can cause further damage or risk the safety of your property. Pruning helps improve the structure and strength of the tree.

*Continued on next page*

## Timing is Important

While a tree may need both a trimming and a pruning, these should not be performed at the same time. Trees will become stressed if too much material is removed at once, or if it is removed at the wrong time. Generally, trimming can occur every year, and in different seasons depending on the type of tree. Pruning is usually required every few years and should be performed when the tree is dormant, normally between November and January.

## Need Professional Help?

Depending on the needs of your tree, the tools required, and the safety concerns for the owner, hiring a certified arborist might be a good idea. Look for an ISA (International Society of Arboriculture) certified arborist at: [www.treesaregood.org/findanarborist](http://www.treesaregood.org/findanarborist)

### Heartwood

by Robert Macfarlane

Would you hew me  
to the heartwood, cutter?  
Would you leave me open-hearted?  
Put an ear to my bark, cutter,  
hear my sap's mutter,  
mark my heartwood's beat, my leaves' flutter.  
Would you turn me to timber, cutter?  
Leave me nothing but a heap of logs, a pile of brash?  
I am a world, cutter,  
I am a maker of life —  
drinker of rain, breaker of rocks,  
caster of shade, eater of sun,  
I am time-keeper,  
breath-giver,  
deep-thinker, cutter,  
I am a city of butterflies, a country of creatures.  
But my world takes years to grow,  
cutter, and seconds to crash;  
your saw can fell me, your axe can bring me low.  
Do you hear these words I utter? I ask this of you —  
have you heartwood, cutter?  
Have those who sent you?



The poem, "Heartwood", was written in 2018 for the people of Sheffield, England during their years-long battle to save their street trees (above). Initially, the City of Sheffield planned to remove 17,000 trees (almost 50% of the tree population) from the community for a roadway improvement project. In five years over 5,600 trees were taken down before protests and public opinion stopped the project. If you're interested in learning more, here is a link to a lengthy but thorough recap of the years of conflict:

<https://www.theguardian.com/environment/2023/oct/24/chainsaw-s-disguises-and-toxic-tea-the-battle-for-sheffield-trees>