



## The Refreshing Relief of A Canopy

As the days are getting longer and the air is warming up, you may find yourself actively seeking shade from the sun throughout the day. In addition to buildings and physical structures, the main sources of shade on campus are the living, oxygen-producing trees.

Trees impact our lives in a variety of unseen ways. They can physically shade us with their canopies, pull carbon out of the atmosphere, cool the air around them through transpiration, reduce storm water runoff, improve air and water quality, and reduce energy costs when strategically placed near buildings. Trees are a vital part of the natural ecosystem and in the built environment, they create an oasis of benefits for both wildlife and people.

Sonoran Native trees and other arid-adapted species are incredibly important to urban resilience because they endure high temperatures with minimal water. Check out some native species below!



**Foothill palo verde**



**Netleaf hackberry**



**Desert willow**

***"Trees provide ecosystem services that sustain environmental and human health. Yet, despite their significant contributions, their value is difficult to define."***

**Maria Rojas, Campus Arboretum Intern  
Class of 2023**

## **Featured Plant: Cork Oak**



**Common Name: Cork oak**

**Family Name: Fagaceae**

**Botanical Name: *Quercus suber***

The **cork oak (*Quercus suber*)** tree is a species native to the western Mediterranean, a region prone to fire with its hot and dry climate. The non-living outer bark (cork) of the tree is spongy- like a honeycomb of tiny air-filled cells. During a wildfire, this adaptation allows the outer bark to burn while insulating and protecting the living tissue inside so the tree can survive and quickly resprout. This incredible mechanism of protection doubles as an excellent method to gently age bottled wine with the passing of air through the porous material of the cork.

## **Does removing the cork kill the tree? Nope!**

These trees can live for 200 years! The cork cannot be removed until the tree is 25 years old, but after that it can be harvested every 9 to 12 years. Since cork can be sustainably harvested from a living tree, the cork producing forests of Portugal and Spain support a wealth of biodiversity. In Portugal, 37 mammal species can be found in cork oak forests, including the world's most endangered feline- the **Iberian lynx**.

**Check out the largest cork oak on campus at the South side of the Engineering Building:**

<https://apps.cals.arizona.edu/arboretum/taxon.aspx?id=244>

**Money doesn't grow on trees... but trees can save money!**



**It may seem impossible to quantify the importance of a complex living organism like a tree.**

**Well, there's an app for that.**

**i-Tree** is a free software program designed to estimate the financial benefits of a tree. Created in partnership with the USDA Forest Service, i-Tree uses current peer-reviewed science to approximate how

trees can impact the microclimate around them. **MyTree is the easiest tool to assess the benefits of an individual tree.** With just a few questions about location, species, condition, and size, MyTree can estimate the monetary value that tree is providing in terms of air pollution removal and stormwater mitigation. This type of information is crucial to management and maintenance decisions, investments in climate action planning, insight into optimal tree selection, or if you're just curious how that tree in your backyard benefits your home!

**Let's take look at the cork oak on the south side of the engineering building:**

In a single year, that oak tree reduces the engineering building's energy bill by \$30 worth of electricity savings, mitigates 34 gallons of stormwater runoff, and removes 194 lbs of CO2 from the atmosphere. Over a span of 20 years that single oak tree will have sequestered over 1,217 lbs of carbon!



MyTree Benefits	
For this year.	
Cork oak, ( <i>Quercus suber</i> )	
Annual values:	
Carbon Dioxide Uptake	\$4.52
Carbon Sequestered <sup>1</sup>	52.97 lbs
CO <sub>2</sub> Equivalent <sup>2</sup>	194.23 lbs
Storm Water Mitigation	\$0.31
Runoff Avoided	34.34 gal
Energy Usage Per Year <sup>3</sup>	\$29.83
Electricity Savings	235.28 kWh

Learn how to use MyTree: [https://www.itreetools.org/media/watch.php?OJtkx\\_xvVrE?list=PLTpJ4X0F9py38BydbpvZDykjUECIfzktB](https://www.itreetools.org/media/watch.php?OJtkx_xvVrE?list=PLTpJ4X0F9py38BydbpvZDykjUECIfzktB)

## Campus Arboretum Tours

For more than a century the campus landscape has served as a living laboratory to test



what plants do well in the Arizona desert. Warren Jones, UA professor of Landscape Architecture (1966 – 1982), carefully selected hundreds of tree seedlings from around the world to find species that thrive in urban microclimates. Many of these would eventually become a noble example of its species and their popularity in landscaping would spread through the Southwestern U.S.

As a result of this work, the Campus Arboretum has a wonderful collection of unusual and delightful

specimens- like the **floss silk tree!**

Trees around the world tour features some of these unique trees and describes their native uses and interesting folklore.

[Click Here](#) to explore the  
**"Trees Around the World"**  
Virtual Tour

**Join one of the last in person tours of the season.**

Free Tree Tours are scheduled on **Sundays at 9:30am**

To view the schedule or for information on tours, click below.

[Click HERE](#) to view the full calendar of Campus Arboretum Tours

**CLICK HERE TO DONATE**

*Promote stewardship and conservation of urban trees in Arizona.*

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