

EXCERPTS FROM:  
BUILDING UP THE URBAN FOREST ON  
PRIVATE PROPERTY



Debunking the Myths  
Magen Shaw, August 4, 2021



COMMON MYTHS AND CONCERNS

"Trees need a lot of water."

- Trees require surprisingly little water during and after establishment.
- Watering a tree costs about \$10 a year.
- Established trees need deep infrequent watering.
- Newly planted trees should be watered with up to 5 gallons of water once a week for the first 3 years.
- Small, established, low water trees need only about 20 gallons a month – the amount most people use in one shower!
- Large and mature, low water trees need approximately 200 gallons per month
- Pay attention to the soil moisture under your tree and adjust amounts accordingly.
- A soaker hose or drip system ensures no runoff or water waste.
- A 4" layer of mulch can help conserve soil moisture, and may reduce watering needs.



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Table of tree watering frequency and application rates, by tree size (canopy diameter)

Tree Size	Cool Season (Nov-Apr)	Gallons to Apply	Warm Season or no rain (May – Oct)	Gallons to apply
<b>LOW-WATER TREES</b>				
Small established tree (10-ft canopy)	No Water	0	Monthly	20-40
Medium tree (20-ft canopy diameter)	No Water	0	Monthly	100-140
<b>MODERATE-WATER TREES</b>				
Small established tree (10-ft canopy)	Monthly	30-60	Every 2 weeks	30-60
Medium tree (20-ft canopy diameter)	Monthly	110-250	Every 2 weeks	140-260
<b>ESTABLISHED HIGH-WATER TREES (Do not plant new high-water requiring trees)</b>				
Large tree (30-ft canopy)	Every 2 weeks	250-350	Weekly	300-400
Very large tree (50-ft canopy)	Every 2 weeks	700-1000	Weekly	800-1000



For more information about tree watering visit: <https://sdruc.com/treewatering/>

COMMON MYTHS AND CONCERNS

"Trees need a lot of water."

Examples of Low Water Use Trees for San Diego County:

LEMON BOTTLEBRUSH  
*Callistemon citrinus*



AFRICAN SUMAC  
*Searsia lancea*



PEPPERMINT TREE  
*Agonis flexuosa*



RED FLOWERING GUM  
*Corymbia ficifolia*



CHITALPA  
× *Chitalpa tashkentensis*



## COMMON MYTHS AND CONCERNS

### "Trees are messy and attract pests."



- Wrong Tree, Wrong Place
  - Tree Selection and Placement are Key
- Some tree species are dioecious, meaning male or female reproductive organs are present on separate individuals. For example, female *Ginkgo biloba* trees have a fleshy cone which can create a stinky mess (pictured left), while male trees do not.
- Most pests may be deterred through a variety of means.

Image: whatgrowsthere.com



## COMMON MYTHS AND CONCERNS

### "Trees are messy and attract pests."

#### Types of Tree Litter

- The amount and type of litter a tree produces varies with each species, and potentially between sexes.
- Evergreen trees drop a small quantity of leaves throughout the year, while deciduous trees drop all their leaves during one season.
- There are many types of tree fruit, many of which are considered dry litter.
- Fleshy fruits, such as berries and drupes, typically create wet litter.



## COMMON MYTHS AND CONCERNS

### "Trees are messy and attract pests."

#### Rodents

- Prevention:
  - Keep yard free of food sources, lids on trashcans, bird feeders inaccessible. Limit nesting places such as wood piles, thick vegetation etc.
- Biological Control:
  - Snakes, owls and raptors can help keep rodent populations under control.
- Proper Spacing
  - New trees should be spaced so that their branches do not touch each other or any structures once at mature size.
- Regular Pruning:
  - Existing trees may require pruning to keep branches away from structures, fences, poles and other trees
- Trunk Guards:
  - Can be placed around trunk to prevent rodents from being able to climb up the tree. Especially valuable for fruit trees.
- Trapping:
  - Traps can be used to control rodent populations



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#### Birds

Most species of birds and their nests are federally protected by the **Migratory Bird Treaty Act**. It is illegal to harm protected birds and/or disrupt their reproductive cycle. Nesting season for most bird species is between February and September. The following methods should be used as means of PREVENTION and should not be used to scare actively nesting birds:

- Animal Decoy
- Shiny Objects
- Netting
- Electronic Devices – Motion or Sound
- Selective Trimming
- Covers – Car, Pool, etc.



## COMMON MYTHS AND CONCERNS

“Trees are messy and attract pests.”

Examples of Evergreen Trees with Dry Fruit for San Diego County:

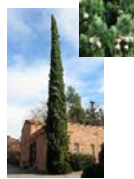
**AUSTRALIAN WILLOW**  
*Geijera parviflora*



**SWEET MICHELIA**  
*Michelia doltsopa*



**NORFOLK ISLAND PINE**  
*Araucaria heterophylla*



**ITALIAN CYPRESS**  
*Cupressus sempervirens*



**BRISBANE BOX**  
*Lophostemon confertus*



## COMMON MYTHS AND CONCERNS

“I don’t have enough space in my yard for a tree.”

- Trees come in many shapes and sizes; there are many small growing species of trees.
- Assess the space available and the site limitations prior to choosing a tree species.
- Plan for maturity; know how tall and wide the tree will grow.
- Small trees require a tree well as little as 3 feet squared.
- Get creative with landscape architecture; give trees more space by building a platform or bridging over the root system (Arborist oversight recommended).



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“I don’t have enough space in my yard for a tree.”

Examples of Small Trees (>25' H/ >20' W) for San Diego County:

**WESTERN REDBUD**  
*Cercis occidentalis*



**LEMON**  
*Citrus limon*



**TOYON**  
*Heteromeles arbutifolia*



**ANGEL'S TRUMPET**  
x *Brugmansia*



**BRONZE LOQUAT**  
*Eriobotrya deflexa*



## COMMON MYTHS AND CONCERNS

“Tree roots will crack foundations and lift concrete.”



ISA-Arbor, Image: Los Angeles Times

- Most often a case of 'Wrong Tree, Wrong Place'.
- Root Damage Potential ratings differ between tree species.
- Trees planted near hardscape or structures should have Low to Moderate Root Damage Potential ratings, depending on the amount of space available.
- Proper spacing and tree selection are essential to avoid infrastructure conflicts. Plan for the mature height and width of the tree.
- In general, tree root systems extend out 2–3 times the dripline; most roots are in the top foot of soil; roots extend out about 1.5 times the height of the tree; and more than 60 percent of the absorbing root system is beyond the dripline.



## COMMON MYTHS AND CONCERNS

“Tree roots will crack foundations or lift concrete.”

Examples of Trees with Low Root Damage Potential for San Diego County:

**PURPLE ORCHID**  
*Bauhinia variegata*



**EVERGREEN PEAR**  
*Pyrus kawakamii*



**AFRICAN FERN PINE**  
*Afrocarpus falcatus*



**CAJEPUT**  
*Melaleuca quinquenervia*



**PINK TRUMPET**  
*Handroanthus heptaphyllus*



## COMMON MYTHS AND CONCERNS

“Trees increase fire risk.”

Lessons from CAL FIRE:

- Trees near structures stay intact, during and after wildfires
- Main cause of structure loss = fire brands (embers) carried far distances by winds
- Homes burned due to:
  - Inadequate fire-resistant materials
  - Lack of defensible space
- Trees didn't burn the houses!



LYNETTE SHORT - CAL FIRE ; Photo: New York Times



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“Trees increase fire risk.”



CEDAR FIRE, SAN DIEGO 2003

LYNETTE SHORT - CAL FIRE



## COMMON MYTHS AND CONCERNS

“Trees increase fire risk.”

Defensible space



Zone 0 - Ember Resistant Zone

Extends 5 feet from buildings, structures, decks, etc.

Zone 1 – Lean, Clean, Green Zone

Extends 30 feet from buildings, structures, decks, etc. or to your property line, whichever is closer.

Zone 2 – Reduce Fuel Zone

Extends from 30 feet to 100 feet out from buildings, structures, decks, etc. or to your property line, whichever is closer.



## COMMON MYTHS AND CONCERNS

### "Trees increase fire risk."

#### Zone 0 Guidelines:

- Use hardscape like gravel, pavers, concrete and other noncombustible mulch materials. No combustible bark or mulch
- Remove all dead and dying weeds, grass, plants, shrubs, trees, branches and vegetative debris (leaves, needles, cones, bark, etc.);
- Check your roofs, gutters, decks, porches, stairways, etc.
- Remove all branches within 10 feet of any chimney or stovepipe outlet
- Limit plants in this area to low growing, nonwoody, properly watered and maintained plants
- Limit combustible items (outdoor furniture, planters, etc.) on top of decks
- Relocate firewood and lumber to Zone 2
- Replace combustible fencing, gates, and arbors attached to the home with noncombustible alternatives
- Consider relocating garbage and recycling containers outside this zone
- Consider relocating boats, RVs, vehicles and other combustible items outside this zone



## COMMON MYTHS AND CONCERNS

### "Trees increase fire risk."

#### Zone 1 Guidelines:

- Remove all dead plants, grass and weeds (vegetation).
- Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney.
- Trim trees regularly to keep branches a minimum of 10 feet from other trees.
- Relocate wood piles to Zone 2.
- Remove or prune flammable plants and shrubs near windows.
- Remove vegetation and items that could catch fire from around and under decks, balconies and stairs.
- Create a separation between trees, shrubs and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.



## COMMON MYTHS AND CONCERNS

### "Trees increase fire risk."

#### Zone 2 Guidelines:

- Cut or mow annual grass down to a maximum height of 4 inches.
- Create horizontal space between shrubs and trees. (See diagram)
- Create vertical space between grass, shrubs and trees. (See diagram)
- Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 3 inches.
- All exposed wood piles must have a minimum of 10 feet of clearance, down to bare mineral soil, in all directions.



## COMMON MYTHS AND CONCERNS

### "Trees increase fire risk."

#### Vertical Spacing:

- Remove all tree branches at least 6 feet from the ground.
- Allow extra vertical space between shrubs and trees.  
Lack of vertical space can allow a fire to move from the ground to the brush to the treetops like a ladder. This leads to more intense fire closer to your home.
- To determine the proper vertical spacing between shrubs and the lowest branches of trees, use the formula below.

