Healthy Trees, Healthy Communities

canopy.org
Tree Selection, Watering, and Care

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Presented by Canopy:

Evany Wang, Community Forestry Coordinator
Gabrielle Trudeau, Tree Care Coordinator
Topics

- Canopy, a non-profit
- Know Your Trees, Know Their Needs
- Young Tree Care
- Right Tree, Right Place
- Benefits of Trees
- Lawn Transitions
- Community Resources
- Q&A
About Canopy
Canopy’s Mission

To grow urban tree canopy in the Midpeninsula for the benefit of all
Three Interconnected Programs

Trees

Education

Advocacy
Canopy’s South Palo Alto Tree Initiative

- Over 500+ trees planted since 2016
- Free trees for residents south of Oregon Expressway
- Tree Protection Ordinance updated in 2022!
Know your trees, know their needs
Assessing Tree Needs

Different trees have different water and care requirements. To determine how much and how often your tree needs water, consider:

**Species:**
- Canopy’s tree library for looking up watering needs for all your trees
- Urban Tree Key (website) or A Californian’s Guide to the Trees Among Us (book) for identifying tree species

**Health:**
- Healthy trees will need less water
- Hire a certified arborist to help determine the health of your trees.
Assessing Tree Needs

**Age:**

- Young trees need more water than established trees
  - 15 gallons a week
- [Caring for young trees](#) - Canopy care instructions for trees age 5 or younger
- [Canopy’s Watering Guidelines](#) - for species specific watering after establishment
Assessing Tree Needs

Soil:
- Clay soil will retain water better, but will take longer to drain. So will require less frequent irrigation
- Loam is mixed
- Sandy soil will not hold much water so it will require more frequent irrigation.

Other site conditions:
- Sun/shade exposure
- Other plants nearby
- Nearby water sources
Irrigation Guidelines

- Water a tree once a week for the first 3 years to get it established
- Practice deep water basin watering to establish deep roots (10-15 gallons a week)
- Water your tree during a drought and if you stop watering your lawn
- Use Canopy’s Tree Watering Guidelines
Don’t Do These!

- Don’t just rely on sprinklers for establishing a tree
- Don’t water established native oaks* in the summer

*Native species thrive under two conditions: cold and wet, or hot and dry
Young Tree Care
Regularly check your tree for...

- Flattened watering basin
- Extended watering basin to match the dripline
Regularly check your tree for...

Lack of mulch

Weeds inside the drip line
Properly Applied Mulch...

- Insulates the roots from extreme temperatures
- Slows soil moisture evaporation
- Reduces water use
- Suppresses weeds
- Natural fertilizer
- Prevents soil compaction
Mulch to Conserve Moisture
Mulching Tips

- Use organic matter such as wood chips, with or without leaf matter. Trees actually prefer wood chip mulch and the “duff” created by their own leaves.

- Apply mulch layer 2-4 inches deep, extending at least as far as the drip line.
Mulching Tips

- If weeds persist, place a layer of newspaper or cardboard, or a biodegradable weed cloth fabric under the mulch.
- Replenish mulch layer every spring or annually.
- No mulch volcanoes!
Right Tree,
Right Place
Right Tree Right Place Program (RTRP)

Allows for free removal and replacement of trees interfering with power lines

- Removal — at no cost, leaving the stump. Plus up to $300 reimbursement for stump grinding.
- Replacement — Rebate up to $50 for a replacement tree. Tree must be utility friendly or can be larger if planted away from utility wires. Canopy can help recommend replacements.
- More information at City of Palo Alto website
Site Assessment: Match characteristics of the site with the characteristics of the tree... short-term & long-term!

Planting the Right Tree in the Right Place is a Guiding Principle in urban forestry and arboriculture.
Right Tree, Right Place

Assess the Site:

**Location:** sun exposure, growing space and land use

**Size:** distance from utilities, buildings, and hardscape

**Maintenance:** water availability / irrigation regime, pruning schedule

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**Local Climate, SFBay**

- Sunset Zones 7, 14-17
- USDA Zones 9-10
- Avg. Annual Rainfall
  - Palo Alto, San Jose- 16”
  - Muir Woods- 37”
  - Joshua Tree- 8”
Right Tree, Right Place

Assess the Tree:

Species:
- Local climate and native climate (Sun Exposure / Water / Temperature / Soil, etc.)
- Characteristics: Root damage potential, growth rate, lifespan, diversity and adaptability (native vs nonnative)

Size and shape at maturity

Maintenance: pruning needs, litter/fruit production
Right Tree, Right Place

- Assess the site, THEN make tree recommendations
- Happy Tree = Healthy Tree
- Canopy’s Trees to Plant Now blog lists trees to plant now and why
- Select multiple species:
  - Nursery availability can vary
  - Multiple species maintains biodiversity
Establishing Resilient/Drought-tolerant Trees

- How to select an appropriate species:
  - Research tree before planting:
    - Ex: SelecTree or Canopy Tree Library
    - Plan for maximum height and width
    - Cal-IPC for invasive species to avoid

- Plant correctly
  - How to Plant a Tree Video
  - Volunteer opportunities to practice
Benefits of Trees
Benefits of Trees

Environmental
- Store carbon
- Intercept & clean rain water
- Trap particulate matter
- Conserve water
- Reduce stormwater runoff
- Prevent erosion
- Provide habitat

Economic
- Moderates temperature
- Energy reduction
- Noise attenuation
- Traffic calming
- Property values
- Pavement longevity
- Green jobs

Health
- Reduce UV-B exposure
- Respiratory health
- Green exercise
- Mental health
- Stress reduction
- Places to gather
- Inspiration and sense of peace
How Trees Save Water

- Manage rainwater in storm events
- Improve water quality
- Slow water down, helps recharge aquifers
- Drought-tolerance aids water conservation
Summary: maximize the water conservation of trees and landscaping

- Plant the right tree in the right place
- Plant drought-tolerant species
- Incorporate more trees in your landscape for improved water quality
- Apply mulch!
Remove Your Lawn, But Help Trees Transition
Deciding to remove your lawn or letting it go “golden”? Consider the following options:

- Substitute with a drought-tolerant native grass to conserve water yet still maintain the landscape (ex. Tall red fescue mix)

- Lawn Conversion Rebates (valleywater.org)
Help Your Tree Transition

- Make a watering plan for your tree by using Canopy’s Tree Watering Guidelines
- Mulch the area around your trees
- Consider installing drip irrigation
Community Resources

Find Canopy resources at [canopy.org](http://canopy.org)!
Community Resources

Check out these additional links for resources recommended by Canopy.

- Canopy’s Tree Watering Guidelines:
- Canopy’s blog: Tree Mistakes to Avoid
- Canopy’s Resources for Lawn Conversion:
  - Jain USA: How To Protect Trees During A Turf Conversion
  - Huffington Post: Does removing your lawn really save water?
- Residential rebates (including for landscape) from Santa Clara Valley Water District.
- Canopy’s Tree Library
- Canopy’s Tree Hotline
Check out these additional links for resources recommended by Canopy.

- [Save Our Water and Our Trees brochure](#)
- [Join Canopy’s mailing list](#) for watering reminders
- [RTRP Program](#) for trees under utilities
- [Watch](#) Canopy Presents How To Plant A Tree video
- [SelecTree](#) (online tree database)
- [Cal-IPC.org](#) for list of invasive species to avoid
Q&A
Canopy Staff Presenters

Evany Wang
evany@canopy.org
650-559-6705
Community Forestry Coordinator

Gabrielle Trudeau
gabrielle@canopy.org
408-603-9993
Certified Arborist and Tree Care Coordinator
Thank you for joining us!

3921 East Bayshore Road
Palo Alto, CA 94303
650-964-6110
info@canopy.org
Canopy.org