

Plant Talk

Cielo Sichi, Landfour Landscape Architecture
Sarah Sutton, EcosDesign Studio



Tuesday, April 13, 2021
11:00am-12:30pm

Join the conversation on social media:
#WSC2021



VIRTUAL EVENT: APRIL 6, 13, 20, 27

PRESENTED BY:





Water Conservation Showcase

VIRTUAL EVENT: APRIL 6, 13, 20, 27

PRESENTED BY:



Safety Message

- **Egress:** two paths out in case first is blocked.
- Have “**Go**” bag prepared with essentials.
- Set up and rehearse **convening location** with family.
- **Duck and cover** in case of an earthquake.
- **Take ergonomic breaks.**
- Continue to regularly **wash hands** and where a **face mask** and keep **socially distant** in public.



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Water Conservation Showcase

VIRTUAL EVENT: APRIL 6, 13, 20, 27

Virtual Exhibitor Packet

TO ENTER THE RAFFLE

Look for the letters!

1. Collect the 7 letters located on the Premium Exhibitor pages
2. Unscramble the 7 letters to spell a water-related word
3. Enter that word and your contact info at tinyurl.com/WCSraffle

Raffle prizes generously donated by:
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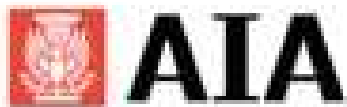
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Course number: WS0027

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| Topic | Timing | Speaker |
|--|---------------|-----------------------|
| Logistics and speaker introductions | 5-7 minutes | Ryan |
| Plant and landscape questions round 1 | 15-18 minutes | Cielo and Sarah |
| Puzzler 1 solution and introduction of puzzler 2 | 5-7 minutes | Ryan |
| Plant and landscape questions round 2 | 15-18 minutes | Cielo and Sarah |
| Stump the chumps round 1 | 2-5 minutes | Cielo, Sarah and Ryan |
| Plant and landscape questions round 3 | 15-18 minutes | Cielo and Sarah |
| Stump the chumps round 2 | 2-5 minutes | Cielo, Sarah and Ryan |
| Resources for future questions | 5 minutes | Cielo and Sarah |
| Puzzler two solution and wrap-up | 5 minutes | Ryan |

AGENDA

“I live in San Francisco near the Great Highway. The soil is mostly sand, but my front yard bougainvillea continue to thrive. A couple of weeks ago, the neighbors renovated their back yard garden, and since then large gopher mounds have shown up in the front where the bougainvillea are planted. I have shoveled the sand back, but the gophers keep burrowing back and creating the mounds, the sand of which is pouring onto the sidewalk. What can I do to have them leave the area? I don't want to use poison or even traps.”

- Gene



QUESTION #1

QUESTION SUMMARY RESPONSE (GOPHER)



■ Gophers travel

- Construction + loud equipment

■ Kind approaches

- Plants that repel gophers
 - Lavender, Rosemary, Salvia, Catmint (all Lamiaceae family) as well as Spurge, Ceanothus, Arbutus, Callistimon, Cistus + more
- Sonic Mole, Vole + Gopher repellents

■ Links:

- SFGate: <https://www.sfgate.com/homeandgarden/goldengategardener/article/Gophers-can-be-discouraged-by-these-plants-3588677.php>
- Amazon: <https://www.amazon.com/gopher-repeller/s?k=gopher+repeller>



“I have three redwood trees in my backyard that shade the west side of my home and help keep my home cooler in the summer. My neighbor cut the roots of two of the redwood trees when he installed a pool and a foundation for a new workshop. Now half of one tree is dying or dead and part of the second tree is also dead (see pictures showing brown branches). Is there a way I can save the trees? The local nursery recommended watering to a depth of 5 inches at the drip line, every two weeks.”

- Leslie

Location: Elk Grove, CA



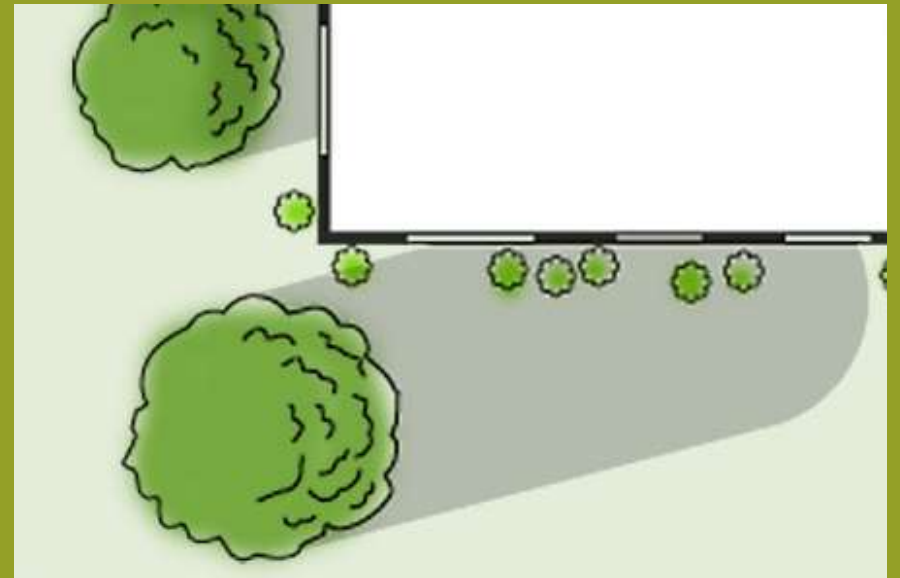
QUESTION #2

“Can you recommend shade trees for the Sacramento area that are drought tolerant? Summer shade is the goal. The space I have for a tree is 16 feet wide by 20 feet long. The shade trees will receive all day sun on the south side of my home.”

- Leslie

Location: Elk Grove, CA

QUESTION #3



DROUGHT TOLERANT SHADE TREES

| WUCOLS SEARCH - Sacramento | | | |
|--------------------------------------|--------------------|-----------|-------|
| Botanical Name | Common Name | Water Use | ET % |
| <i>Ceratonia siliqua</i> | carob | Low | 10-30 |
| <i>Celtis occidentalis</i> | common hackberry | Low | 10-30 |
| <i>Cedrus deodara</i> | deodar cedar | Low | 10-30 |
| X <i>Chitalpa tashkentensis</i> | chitalpa | Low | 10-30 |
| <i>Ulmus wilsoniana</i> "Prospector" | Prospector elm | Low | 10-30 |
| <i>Ulmus pumila</i> | Siberian elm | Low | 10-30 |
| <i>Robinia pseudoacacia</i> | black locust | Low | 10-30 |
| <i>Quercus suber</i> | cork oak | Low | 10-30 |
| <i>Pistacia chinensis</i> | Chinese pistache | Low | 10-30 |
| <i>Pinus canariensis</i> | Canary Island pine | Low | 10-30 |
| <i>Grevillea robusta</i> | silk oak | Low | 10-30 |
| <i>Albizia julibrissin</i> | silk tree | Low | 10-30 |
| <i>Gleditsia triacanthos</i> | honey locust | Low | 10-30 |

Cross check with other references and site conditions

QUESTION 3 - SUMMARY RESPONSE (*SHADE TREES*)

- Engage arborist to assess Redwoods health and safety – visit: <https://www.treesaregood.org/findanarborist/findanarborist>
- Define new shade tree parameters: size, hydrozone, type of tree, etc.
- Plant properly and provide enough room for roots and mature canopy
- Links:
 - <https://www.sactree.com/shady80> - Detailed tree search feature. See partnership with SMUD for free Forester consultation and up to 10 FREE trees!
<https://www.sactree.com/shadetrees>
 - <https://www.cityofsacramento.org/Public-Works/Maintenance-Services/Trees/Street-Tree-List> - general guidance and link to tree planting details
 - <https://saclaw.org/articles/trees-plants-neighborhood/> - summary of Sacramento tree ordinances and regulations

“I am overwhelmed by all the native and drought tolerant options at my local nursery, and I have a brown thumb. I am trying to convert a yard with grass to a drought tolerant, native landscape. Can you give me some advice on the best way to get started? Or better yet, can you recommend a plant palette for the Sacramento area that will grow in clay soil, is climate appropriate, drought tolerant/low water use, and native to our area?”

- Leslie

Location: Elk Grove, CA

QUESTION #4



EVALUATE YOUR SITE

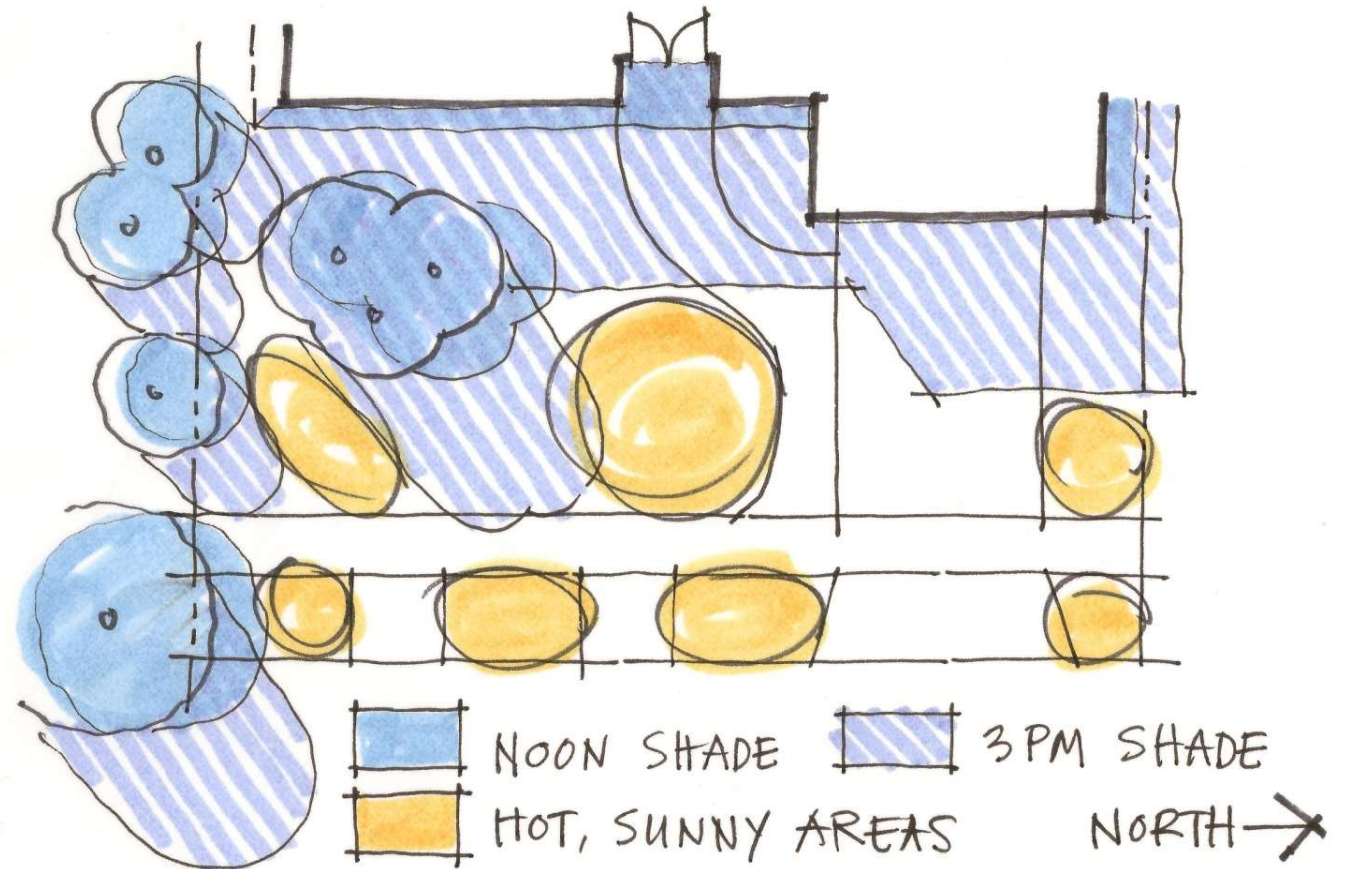
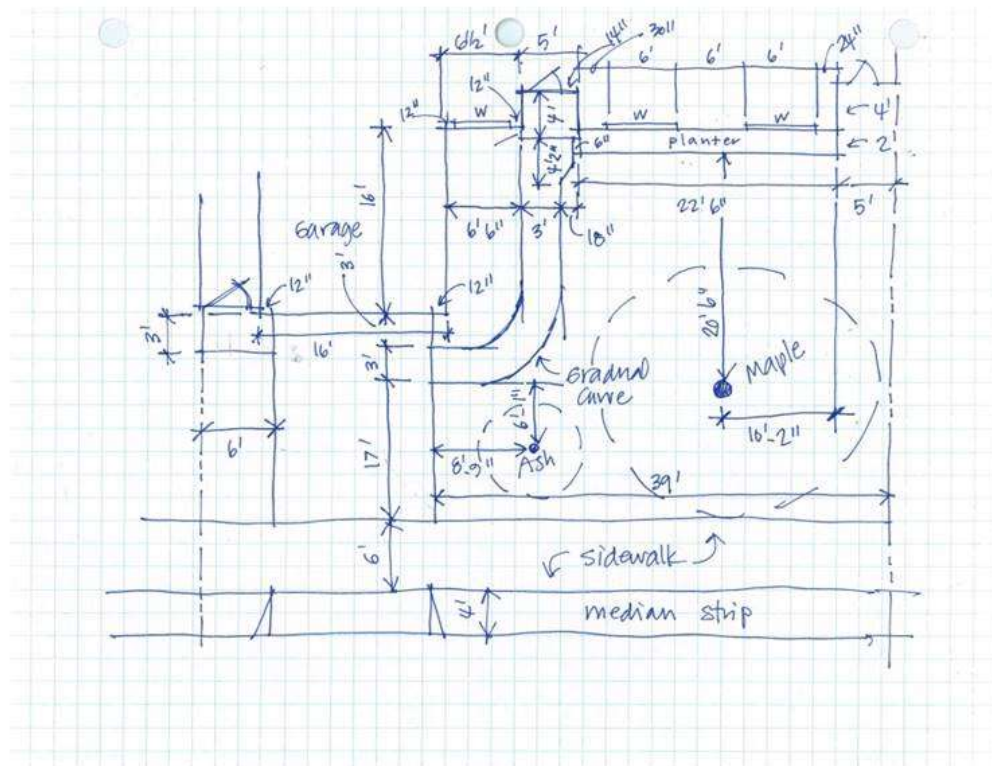


Image Credits: www.kissyourgrassgoodbye.com

DESIGN CONCEPT PROCESS

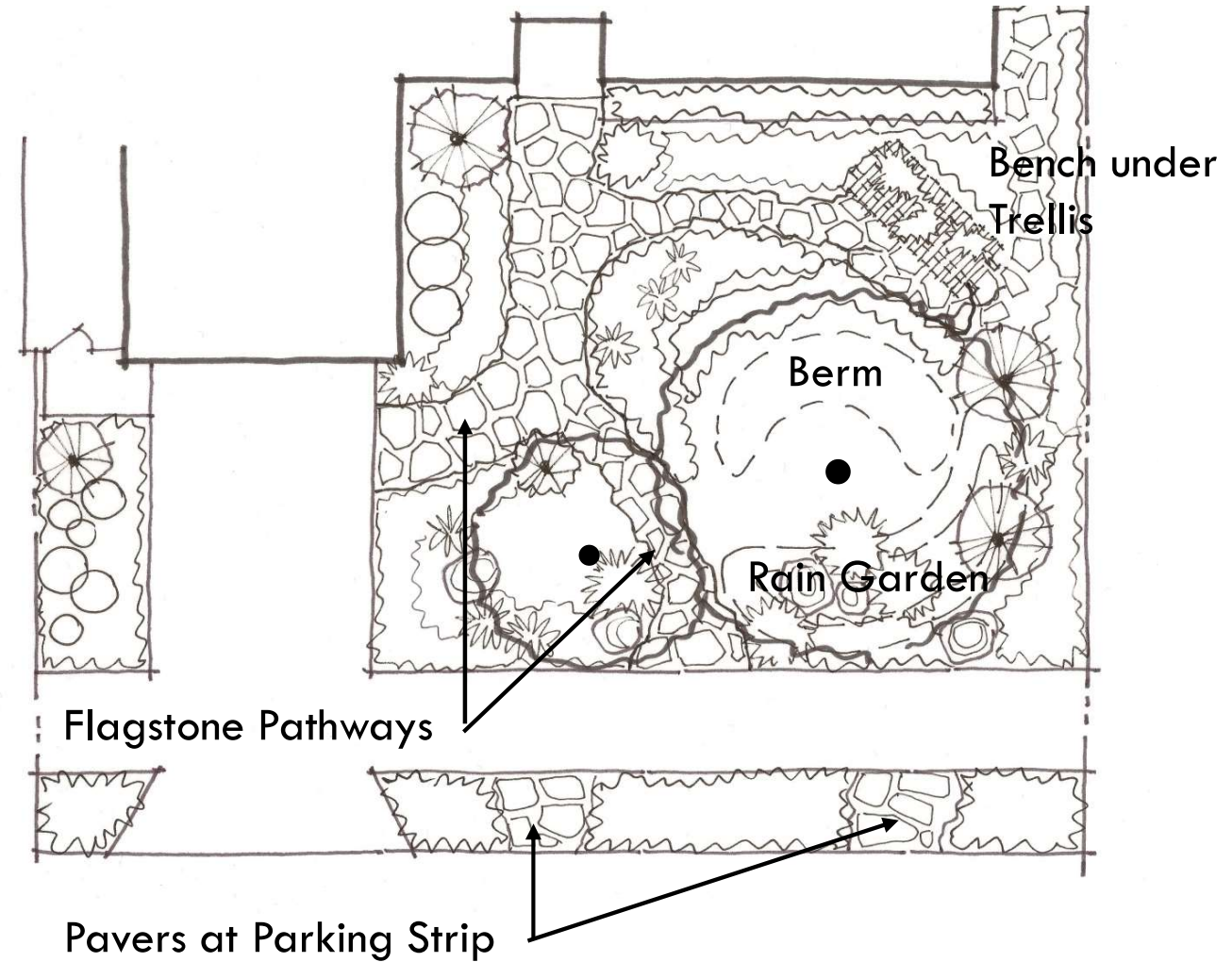
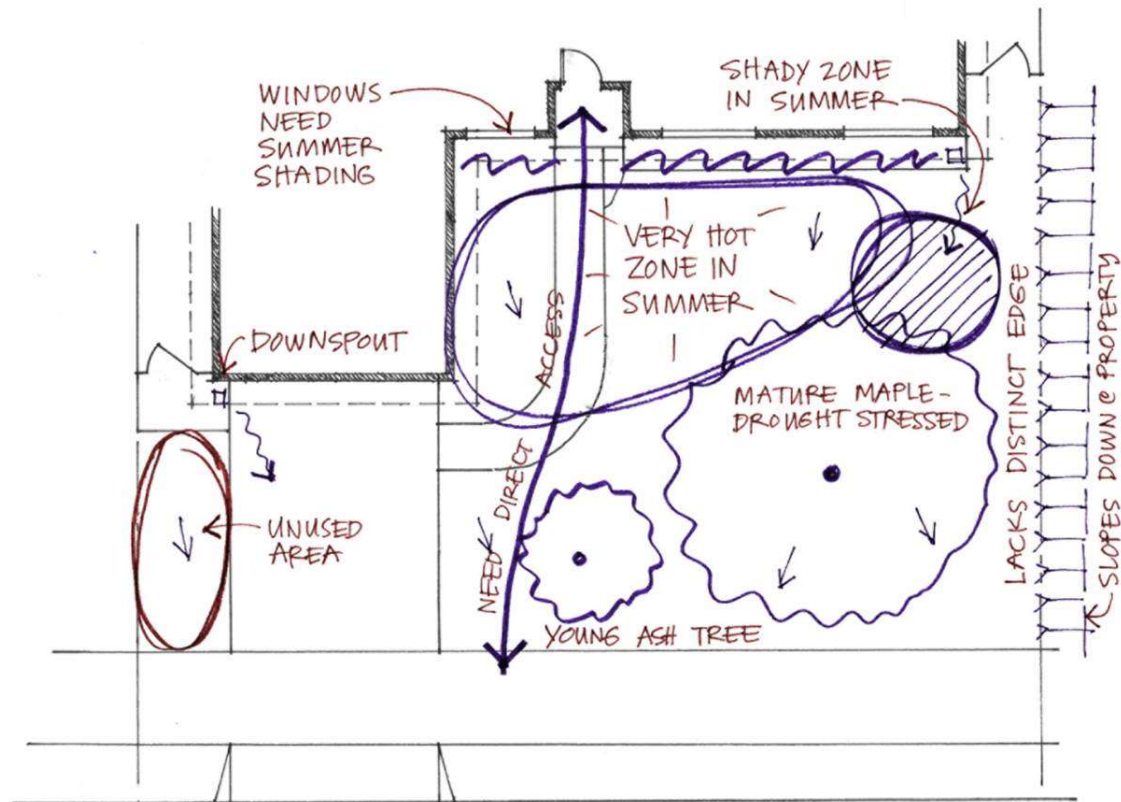


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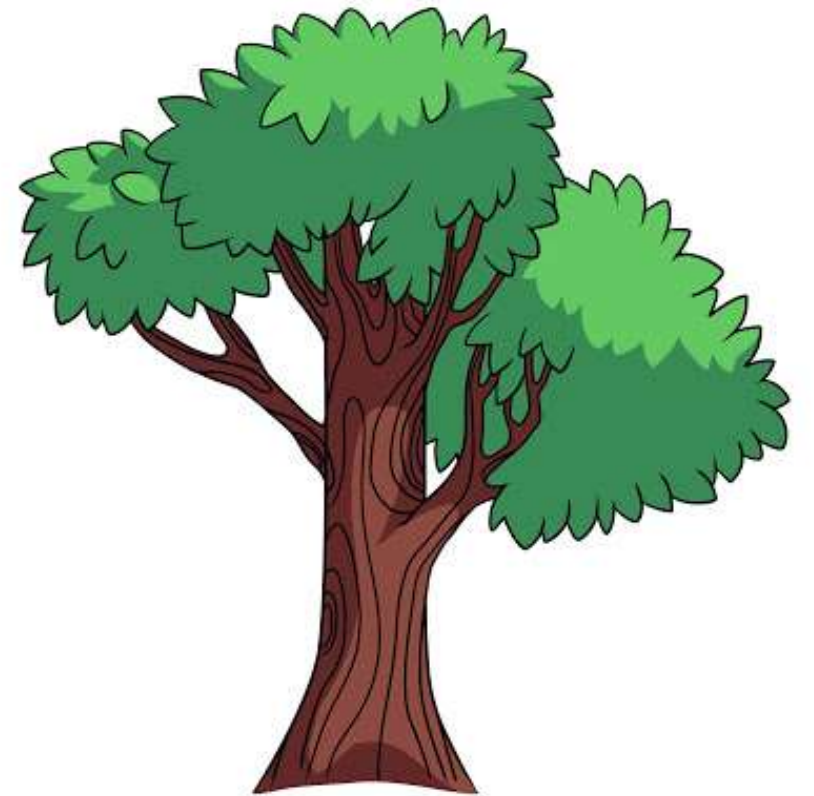
QUESTION #4 SUMMARY RESPONSE (*LAWN REPLACEMENT*)

- Contact your Cash for Grass representative – arrange site visit
- Sheet mulch lawn in place, create base and evaluate your site
- Develop program and identify your theme/vision
- Create design: define plant purposes/goals, size, hydrozones, etc.
- THEN....Choose your plants!
- Links:
 - <https://kissyourgrassgoodbye.com/> - resources, garden design book and workbook
 - <https://www.stopwaste.org/at-home/home-gardening/go-from-lawn-to-garden> - sheet mulching, lawn to garden resources, carbon farming, composting
 - <https://www.laspilitas.com/> - comprehensive resource for native plants in your garden, including plant search by zip code, wildlife gardening, permaculture, all about California ecosystems

PUZZLER #1

The Puzzle

Using a 6-letter word that is a common name for a type of flower, drop the last letter and then rearrange the remaining letters to come up with a 5-letter word for the common name for a type of tree.



PUZZLER #1

The Puzzle

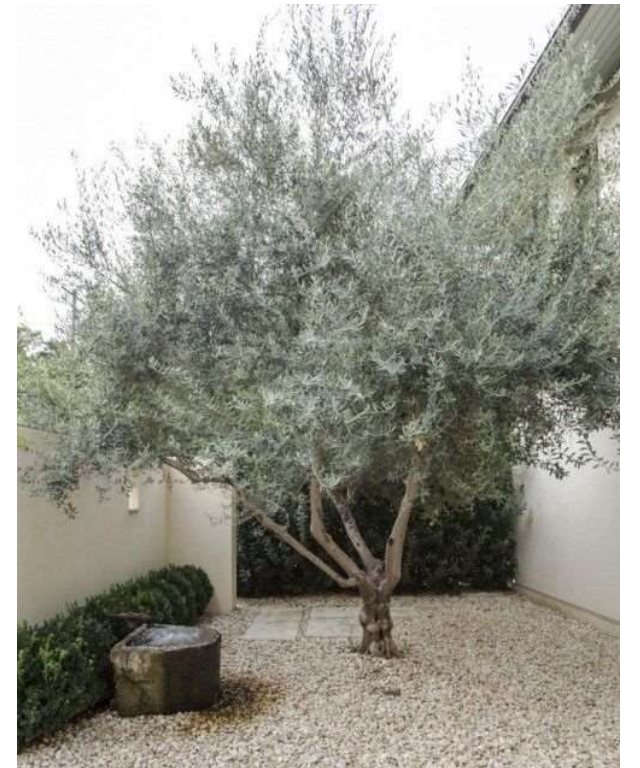
Using a 6-letter word that is a common name for a type of flower, drop the last letter and then rearrange the remaining letters to come up with a 5-letter word for the common name for a type of tree.

The Solution

Violet

Viole unscrambled = Olive

Winner: Elaine Applebaum



PUZZLER #2

The Puzzle

- It takes two gardeners 6 hours to weed, plant and apply mulch to a garden when working together. The gardeners work side-by-side, but do not help each other.
- One is a fast worker and the other is slow.
- The faster gardener would take 8 hours to weed, plant and apply mulch to the same garden if she was working alone.
- How many hours would the slower gardener take to weed, plant and apply mulch to the same garden if he was working solo?





QUESTION#5

“I have made several attempts to plant a groundcover on the slope in my backyard. The slope is fed by microspray and is almost always in full sun. A small portion is in shade part of the day. I want to plant a CA native on my slope that will provide habitat for butterflies/bees. Do you have any recommendations for a native groundcover that would work on a slope?” - Krista
Location: Los Angeles County (San Gabriel Valley area)

QUESTION #5 SUMMARY RESPONSE (GROUND COVER ON SLOPE)

- Plant selection constraints:
 - Full Sun
 - Pollinator attractor
 - Low water use
 - Can take a basketball to the head
 - Low maintenance
- Possible plants: Ceanothus, Arctostaphylos, Asclepias,
- Steps for success:
 - Determine whether sheet mulching would be beneficial
 - Remove soil from behind wall to allow for 4" layer of compost + mulch or 6" for sheet mulch
 - Modify irrigation | Drip grid or point source/drip rings (dependent on plants selected)
 - Plant it out
 - Top of root balls at 1" below top of mulch
 - Wet the soil profile
 - Apply top dressing selected
- Links:
- Calscape: <https://calscape.org/loc-california/?&poploc=1>

STUMP THE CHUMPS

“What are best practices to plant a citrus and fig tree on a the slope shown in the photo (flattening completely isn't an option) and how do we prevent soil run off once the trees are planted?”

- Payal



- “Is fir bark mulch too acidic/otherwise not good for flower beds? I love the smell and look of it but our arborist said it is not good for the soil/plants.
- What is a good general-purpose mulch for flowers and edible plants that also looks nice in a garden?
- What is a good mulch for steep and gentle slopes?
- What if we applied mulch on top of our project to sheet mulch but didn’t use compost or want to apply more in the future; should we remove the mulch just to add compost?
- How often should do we need to add more mulch/compost?
- What should we be looking for in “good” compost or mulch?
- Where should we buy mulch or compost?”

- Payal

Location: San Leandro Hills

QUESTION #6



QUESTION #6 SUMMARY RESPONSE (MULCH.....)

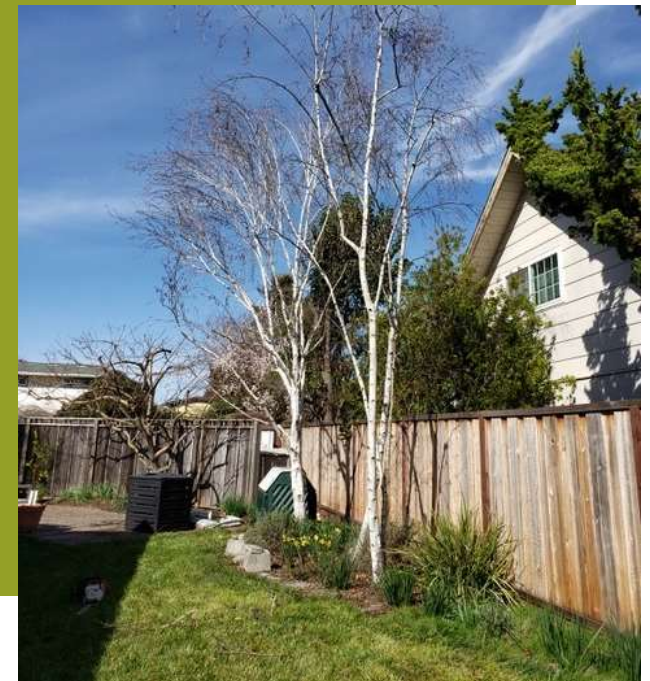
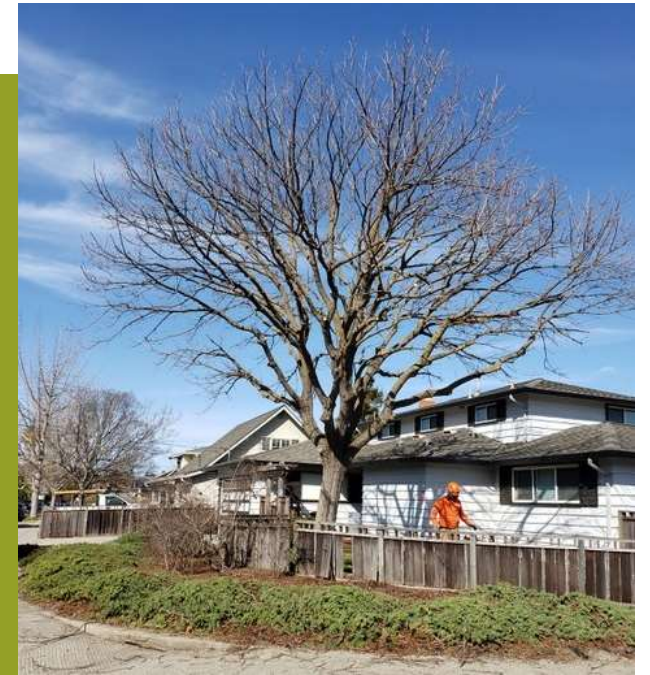


- Best Mulches for.....
 - General purpose that looks good:
 - Varied particle sizes and shapes, low bark content, no added color, made from recycled material
 - Slopes:
 - Varied particle sizes and shapes, low bark content, no added color, made from recycled material
- Adding compost to existing mulched/sheet mulched areas
 - Use a fine screened compost and add a light layer over the top and water it in
- Other mulch info.....
 - How often to replenish?
 - As needed to maintain 3" layer
 - Where should you purchase?
 - Try not to purchase it in bags at the big box stores
 - What should you look for in a good compost?
 - Sweet earthy smell with no ammonia smell, moderate warmth in the pile, unable to recognize mother stock
 - What should you look for in a good mulch
 - Varied particle sizes and shapes, low bark content, no added color, made from recycled material

“In order to avoid pooling of water around our house foundation, our downspouts drain directly to the street. I would like to manage this water to benefit my home landscaping, particularly my mature trees, and am interested in bioswales that filter and replenish groundwater. Can Plant Talk give advice about bioswale placement, construction and plants in the home landscape?”

- Christine

QUESTION #8



WATER CATCHMENT IN RESIDENTIAL GARDENS



Photo credits: Sarah C. Sutton

QUESTION 8 - SUMMARY RESPONSE (*BIOSWALES*)

- Consider options: spread and/or capture in depressions
- 1" rain on 1000SF roof = 600 gallons of water
- Watering Trees: avoid digging into roots or swamping crown of existing trees which may also still need summer water
- Consider greywater use as well to replenish garden and groundwater!
- Links:
 - <https://www.harvestingrainwater.com/> - Brad Landcaster's books/resources for all scales,
 - <https://oasisdesign.net/about/artludwig/> - Art Ludwig's website – graywater, rain water harvesting and storage, ecological design, and more.
 - <https://greywateraction.org/requirements-for-no-permit-systems-in-california/> - California legal requirements, rainwater harvesting, composting toilets.

“What’s the best way to address weeds growing in/around a paver-stone patio?”

- Andrew

QUESTION #9



QUESTION #9 SUMMARY RESPONSE (WEEDS IN PAVER JOINTS)

- Get rid of them using:
 - Torch
- Keep them out by:
 - Sand with additives for joints
- Links:
 - Weed torches: <http://bestreviews.com/best-weed-torches>
- Envirobond <https://www.envirobond.com/how-to/polymeric-sand-vs-regular-sand-for-pavers/>

STUMP THE CHUMPS

“I was the recipient of a rather noxious invader some 6-8 years ago, possibly after a large landscape renovation project. Not sure if it came with a nursery plant, mulch (likely), or workers' tools, but I believe it is a form of wild garlic (see photo attached). Would anyone on the plant talk panel know for sure? I'd love to get verification if possible.

It is almost indestructible, aggressive, and tolerant of a variety of conditions and soil types. My second question is what is the best way (without chemicals if possible) to get rid such undesirables? I have come to a working solution, but this thing uses rootlets, bulblets (see soil clumps) and seeds (black specs on dry flower) to propagate. I am basically (slowly) pulling out flower stalks when I see them, and digging up the plants when/where I can, and tossing into landfill-bound trash. But this is tedious; would love to find a better solution!

I guess the more universal form of this question is how can folks ID invasive plants, and how can we get rid of them!”

- Gary



STUMP THE CHUMPS

Recommendations from last year:

- ◆ Invasive is *Nothoscordum*
- ◆ Do not to pull these out!
- ◆ Cut off tops (cut at plant base)
- ◆ Could try torching the plant?
- ◆ Clear out mulch and apply layers of carboard over the plants





This first one shows a site where likely some seeds fell where I didn't get a chance to pull the flower stalk before it "fruited:"



Here is a section of landscape cloth that I've had in place since about August to test it as a barrier, and you can see that the plants are still growing underneath it. Probably need to use a thick black plastic sheet to get high enough temps and no sunlight to be effective. BTW, mulch is no match for this plant – it eventually pokes through.



Here's a plant that was growing slightly hidden under another bush – I used a spade to sever the leaves just below the surface after taking the pic. I'm hoping that this technique – over time – will work, but looks like it will be several years of keeping after it!

STUMP THE CHUMPS

PUZZLER #2

The Puzzle

- It takes two gardeners 6 hours to weed, plant and apply mulch to a garden when working together. The gardeners work side-by-side, but do not help each other.
- One is a fast worker and the other is slow.
- The faster gardener would take 8 hours to weed, plant and apply mulch to the same garden if she was working alone.
- How many hours would the slower gardener take to weed, plant and apply mulch to the same garden if he was working solo?



PUZZLER #2 SOLUTION

The Puzzle

- It takes two gardeners 6 hours to weed, plant and apply mulch to a garden. The gardeners work side-by-side, but do not help each other.
- One is a fast worker and the other is slow
- The faster one would only take 8 hours to weed, plant and apply mulch to the garden on his own
- How many hours would the slower gardener take to weed, plant and apply mulch to the garden on his own?

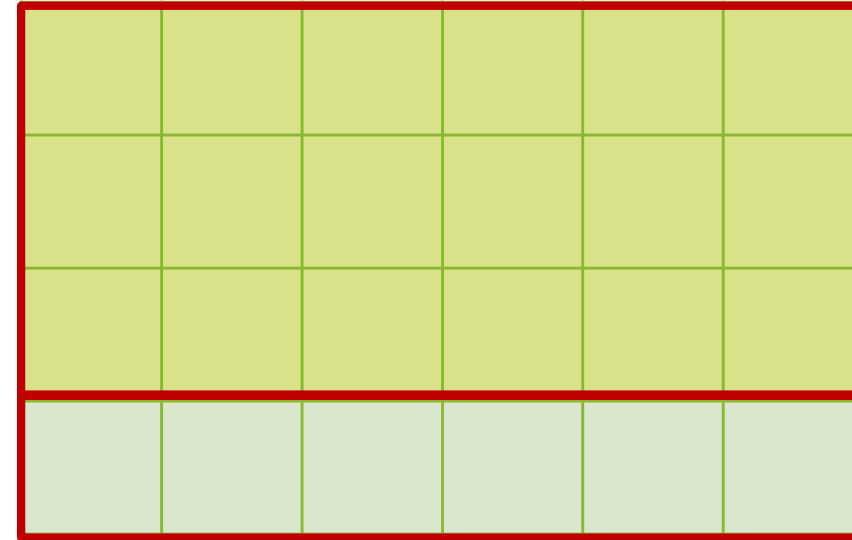
The Solution

- The energetic gardener would be able to do the work alone in 8 hours. In six hours she would do $\frac{6}{8}$ or $\frac{3}{4}$ of the work.
- This leaves $\frac{1}{4}$ of the lawn left for the lazy gardener to mow. He takes the full 6 hours to do this so he works $\frac{1}{3}$ [$(\frac{1}{4})/(\frac{3}{4})$] as quickly as the energetic gardener.
- So he would need 24 hours to do the work on his own, three times as long as the energetic one.

PUZZLER #2 SOLUTION

The Solution

- The energetic gardener would be able to do the work alone in 8 hours. In six hours she would do $6/8$ or $3/4$ of the work.
- This leaves $1/4$ of the lawn left for the lazy gardener to mow. He takes the full 6 hours to do this so he works $1/3$ $[(1/4)/(3/4)]$ as quickly as the energetic gardener.
- So he would need 24 hours to do the work on his own, three times as long as the energetic one.



Work done by energetic gardener when they work together. (3 square/hr.)

Work done by lazy gardener. (1 square/hr.)

Lazy gardener takes 3x as long as energetic gardener to cover the same area.

So if the energetic gardener takes 8 hours to do the job solo, the lazy gardener will require 24 hours.



**Thanks for attending and for
sharing your questions!**

PLANT TALK

Cielo Sichi, Sarah Sutton

18th Annual Water Conservation Showcase
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