

Happy to see you! We will be starting soon.



University of California
Agriculture and Natural Resources

1

Welcome
Sustainable Landscaping



- This event will be recorded for educational or promotional use by the University of California.
 - You can watch it on our YouTube Channel later.
 - You will be muted throughout to prevent background noise.
- Please post your questions** in the "Q&A." They will be addressed at the end of the presentation.
- Use "Chat" for non-question conversations or comments.** Change the "To" if needed to ensure your Chat is sent to those who you want to send it to.

Options:

"Private" if specific Chat only to an individual participant or speaker
 "Panelists" if want to send a Chat only to the speakers
 "Everyone" if you'd like all to see your Chat message

UC CE UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources UC Cooperative Extension **University of California** Agriculture and Natural Resources

2

Who are the UCCE Stanislaus County Master Gardeners?



We extend research-based knowledge and information on home horticulture, pest management, and sustainable landscape practices.



University of California
Agriculture and Natural Resources

3

Sign up for our newsletter

- Online class announcements
- Gardening & pest management articles

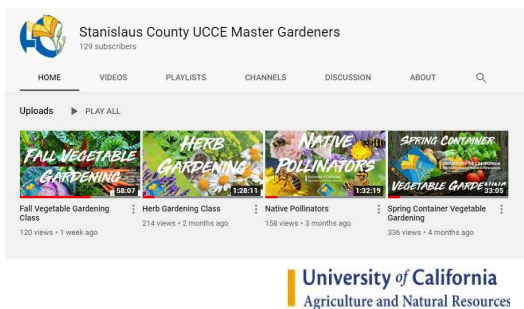


<http://ucanr.edu/stansprout>

Verify your address when you receive an email from us.

4

Subscribe to our YouTube Channel



5

Sustainable Landscaping



Ellen Zagory

UCCE Stanislaus County Master Gardener Program



University of California Agriculture and Natural Resources

6

Agenda



- What is sustainable landscaping?
- Small changes that save water, energy, resources, and help our environment
- Make bigger changes
- Converting your landscape
- Right Plant, Right Place
- Questions?



7

Let's Take a Poll!

What landscape changes would you consider making?

- Changing from sprinklers to drip irrigation
- Removing my lawn
- Removing part of my lawn
- Using less pesticides and fertilizers
- Not sure yet

8

Poll #2

Why do you want to make a change?

- I want to save money
- I want to save water
- I want to help the environment
- I want an easy-care landscape
- I'm tired of pruning and mowing everything and doing so much yardwork!



9

Sustainable Landscapes

- Save water
- Use less resources
- Create less greenwaste
- Use less toxic pesticides




Ellen Zagory

University of California
Agriculture and Natural Resources

10

More Than Cacti, Succulents & Rocks!



www.needpix.com

University of California
Agriculture and Natural Resources

11

New Kind of Beauty

- Lots of green
- Layers of texture
- Contrasts for drama
- Lots of color
- Year-round interest
 - Think in seasons!
 - Remember the pollinators!



UCCE San Joaquin County Master Gardeners

New Zealand flax and lavender cotton
(*Santolina chamaecyparissus*).

University of California
Agriculture and Natural Resources

12

Small Changes



- Learn about your soil & water using this knowledge
- Audit your irrigation system
- Amend your lawn care plan
- Mulch your landscape!
- Less toxic pesticides

University of California
Agriculture and Natural Resources

13

What's Your Soil "Type?"

- 16 different textures
- Knowing soil texture
 - helps determine how much to water and how often
- Learn a little bit about yours!



University of California
Agriculture and Natural Resources

14

Soil Texture by "Feel"

- Take a handful of soil and wet it.
- Is it gritty?
- Does it feel smooth?
- Can you form a ribbon?



Sandy soil: feels gritty & crumbles in your hand.
Clay soil: feels sticky and forms a strong ribbon.
Silty soil: feels smooth and slippery.

15

Watering by Soil Texture



- Clay soils: water tends to puddle.
 - Cut watering times in half if needed
 - Otherwise water may runoff
- Sandy soils: water penetrates quickly.
 - Apply less water more frequently
 - Otherwise water will be wasted past the root zone

University of California
Agriculture and Natural Resources

16

“Hard Pan?”

- Water isn’t penetrating, or is running off?
- An area of your landscape may be compacted.
- How to tell?
 - Can you push a screwdriver 6” deep into your lawn or landscape soil?
 - Can’t?
 - Add compost or aerate your lawn.



www.plxy.com

17

Every Landscape Needs Compost

- Benefits all soil types
- Add 3-4” of compost, mix into the soil using a shovel or a tiller.
- Lawns: add ¼” compost over the top.
- If lawn need to be aerated: borrow an aeration machine from a local nursery or garden center.
 - Never dig in wet soil

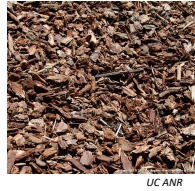


www.pexels.com

18

Mulch Mulch Mulch!

- Reduces water loss to evaporation
- Moderates soil temperature
 - Reduces root stress
 - Increases biological activity
 - Improves soil fertility
 - Helps reduce weeds

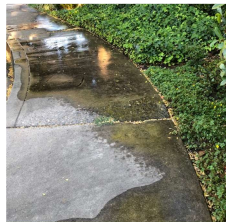


University of California
Agriculture and Natural Resources

19

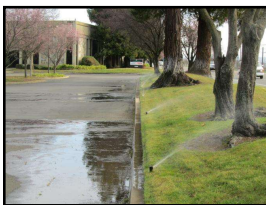
Eliminate Urban “Drool”

- Observe and test your irrigation system
 - Adjust sprinklers towards target
 - Fix broken sprinklers
- Avoid watering:
 - Neighborhood streets
 - When it’s raining
 - During windy days
 - In the afternoon



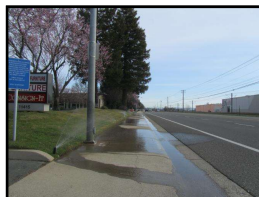
20

Runoff



- Fertilizers carried off
- Pest control products carried off

- Water is wasted
- Pavement eroded

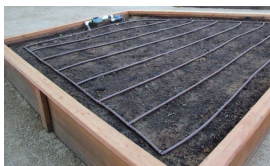


<https://ccuh.ucdavis.edu/urban-runoff-research>

21

Irrigation System Maintenance

- Check for:
 - Leaks
 - Broken parts
 - Timer issues
 - Plugged emitters or lines



UC ANR

- May need to:
 - Flush out the system
 - Add a filter or pressure regulator

22

Lawn Care

- Shut off water during the rainy season
- Use adapted lawn species such as tall fescue (*produce little to no thatch*)
- Water to your soil type
- Mow 1/3 of grass each time
- Try applying less water



www.pickpic.com

23

Pests in the Landscape



- What's your tolerance level?
- Some pests need to stay present to feed beneficial insects.
 - Aphids and lady bugs
 - Leafcutter bees
- Wash or pick off pests when they appear.

University of California
Agriculture and Natural Resources

24

Less Toxic Pesticides

- Choose horticultural soaps or oils
- Avoid broad spectrum pesticides
- Apply products when pollinators and beneficial insects are not present



University of California
Agriculture and Natural Resources

25

Poll #3

- Before this class, did you know that sprinkler water could carry pesticides and fertilizers into our water supply?
- Did you know that the most common pesticide source in our water is ant spray? (*bifenthrin*)
 - Avoid spraying around the perimeter of your house, or wait until after it rains to spray

University of California
Agriculture and Natural Resources

26

Ask the Master Gardeners for Help!

- Not sure...
 - What pest is attacking your plant?
 - If your plant has a disease?
 - Which less toxic pesticide to use?



University of California
Agriculture and Natural Resources

27

Questions?




www.pixnio.com

University of California
Agriculture and Natural Resources

28

What else can you do?

- Grasscycle
- Vermicompost or Compost
- Reduce your lawn size
- Make permeable pathways




University of California
Agriculture and Natural Resources

29

Grasscycling

- Saves water, resources, and nutrients
- Set mower to correct height
- Take off 1/3 height of lawn, leave clippings
- Natural source of nitrogen
 - Does not cause thatch build up,*returns moisture & nutrients to lawn, breaks down quickly



www.calrecycle.ca.gov

30

Composting

Take our composting basics class next month!
November 24, 2020 6:00-7:30 p.m.



www.pxfuel.com

University of California
Agriculture and Natural Resources

31

Lawn Reduction



Felix Wong, creative commons license

32

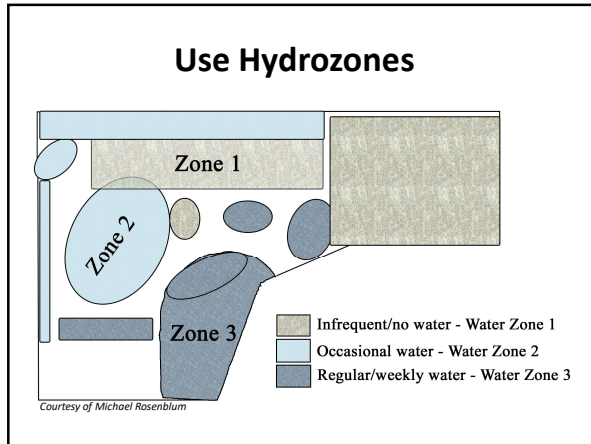
Case Study



- Reduced lawn area
- Added compost & mulch
- Installed low water use plants
- Hydro-zoned
- Saved 50% on water and 20% on maintenance costs!

<http://colag.ucanr.edu/Archive/?article=ca.2018a0041>

33





37

Inline vs. Button Drip

BUTTON (Point-source)

- Spotty coverage to root zones
- Lines have to be added for new plants
- Emitters need replacement
- Leaks and blowouts





INLINE

- Even soil coverage
- No need to add lines for new plants
- Pressure regulated emitters with check valves
- Water use easily calculated in. or gals

38

Converting to Drip

- Visit a professional supply store for help
- Take an upcoming class from us!





University of California
Agriculture and Natural Resources

39

Poll #4

What, if any, of these new tips are you interested in trying?

- Grasscycling
- Using mulch
- Reducing or eliminating my lawn
- Hydrozoning
- Converting to drip irrigation
- Adding permeable paths



40



41

Right Plant, Right Place

- Healthier plants
- Fewer diseases
- Fewer pests
- Less greenwaste
- Less maintenance
- Fewer replacements
- Fewer pesticides



Salvia 'Hot Lips,' lavender, rockrose.
UCCE San Joaquin County Master Gardeners

Rockrose, salvia 'Hot Lips,' and lavender.



42

Getting Started

- Plants need regular watering until established
- Perennials – 1 year or 1 spring & summer (for spring or summer planting)
- Shrubs – 1 full year of regular water
- Trees – 3-5 years of regular water

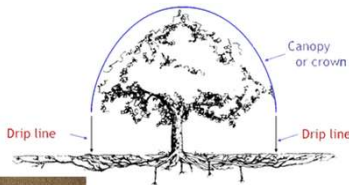


www.maxpixel.com

43

Tree Health

- Water underneath the canopy



UC Davis CA Center for Urban Horticulture
<https://ccuh.ucdavis.edu/tric>

44

Consider

- Size of area
- Plant size at maturity
- Powerlines
- Neighbors
- Tree/shrub litter
- Hydrozones
- Sun vs shade
- Call before you dig! (811)




Butterfly bush, salvia greggii, CA fuchsia, Aster 'Purple Dome', lavender. (Ellen Zagery)

45

Right mature size means:


- Less time pruning
- Less green waste hauling
- Fewer cuts open to pest organisms
- Make better plant choices



UCANR


46

Plant Water Use



Varies by

- Species
- Season
- Plant age




Echinacea, penstemon, artichoke plant.
UCCE San Joaquin County Master Gardeners

47

Clues to discover water-wise plants





- Light – gray, silvery
- Hairy
- Succulent
- Smaller sized leaves
- Vertical leaves
- Waxy coating
 - Leaves will feel very stiff

48

Arboretum All-Stars

- Annuals
- Perennials
- Grasses
- Shrubs
- Vines
- Groundcovers
- Trees
- <https://arboretum.ucdavis.edu/arboretum-all-stars>



Search the All-Star Plant Database

49

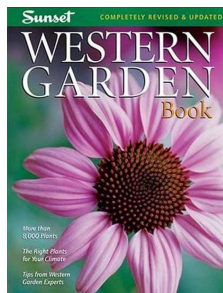
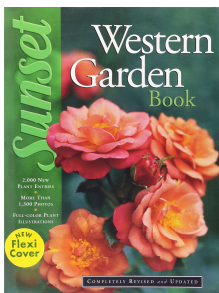
All-Stars Criteria

- Low to moderate water
- Clean foliage
- Long blooming period
- Pest tolerant
- Low maintenance
- Remains attractive throughout the year
- Provides for pollinators





50

Sunset Western Garden Book

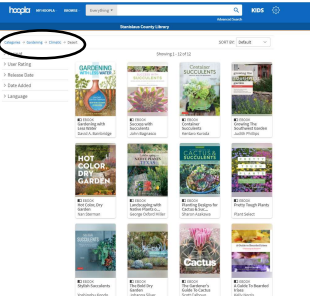


51

**Book recommendations from
our local librarian,
Diane Bartlett**





52



HOOPLA

www.stanislauslibrary.com



53

**Stanislaus County Library
Catalog Entry**



www.stanislauslibrary.com

54

Suggested Plants

- Here are a few trees, shrubs, perennials, and grasses you may want to try.
- We will send you a copy of our newly revised "Water Wise Gardening" publication!



Echeveria 'imbricata'

University of California
Agriculture and Natural Resources

58

Trees



Crape myrtle*
- 'Hopi', 'Catawba'
- Powdery mildew resistant cultivars



Acacia



Australian willow



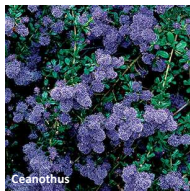
Fruitless olive



Chinese pistache

59

Shrubs



Ceanothus



Daphne



Toyon

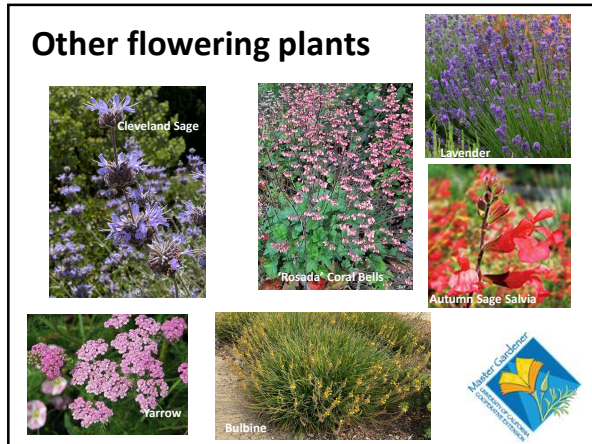


Rockrose

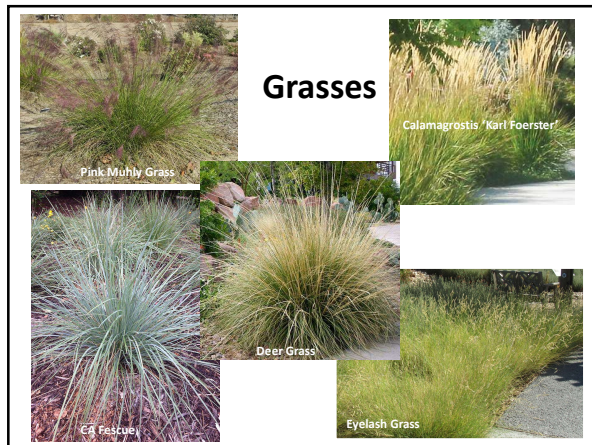


Bush Germander

60



61



62

Plant for Seasonal Color

- Choose evergreens for the “bones” of your landscape.
- Add plants that bloom year-round, not just in spring.
- Use plants that have berries or grass plumes for interest.
- Use complementary colors.

University of California
Agriculture and Natural Resources

63

Plant in groups of 3, 5, 7, etc...



- Gives your landscape structure and depth
- Makes it easier for pollinators to find food
- Is more convenient for hydrozone planning
- Avoids “one of each ‘itis”

University of California
Agriculture and Natural Resources

64

Plant Poll (#5)

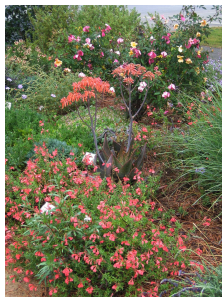
Did you discover any plants you'd like to add to your landscape?

- Yes – the tree suggestions
- Yes – the shrub suggestions
- Yes – the grass suggestions
- Yes –the flowering plant suggestions
- All of the above
- None of the above

University of California
Agriculture and Natural Resources

65

Questions?



Grevillea, Aloe, Rose 'Gruss Aachen'

University of California
Agriculture and Natural Resources

66



Help Us Grow!

You'll receive an email survey in 3 months!

Please take it to help grow the quality of our program.

Thank you!

University of California
Agriculture and Natural Resources
