Ruth Risdon Storer Garden—

A Valley-Wise Garden

Sign made possible by a grant from the Elvenia J. Slosson Foundation
Why Should I use mulch?

Mulch protects the soil and improves the appearance of the home garden.

**Mulch reduces**
- **weeds** by blocking sunlight that weed seeds need to grow
- **water needs** by protecting soil from losing water to evaporation and run-off
- **fertilizer needs** by breaking down and adding its own nutrients to the soil
- **soil compaction** by cushioning the soil below

**Mulch improves**
- **appearance** by covering bare ground and reducing weeds
- **drainage** over time by breaking down and improving soil structure
- **soil health** by adding nutrients to the soil as it breaks down
- **plant health** by improving soil and growing conditions

What is mulch?
Mulch is a protective covering spread on the ground around plants. It improves the health of your garden.

The Arboretum uses medium, shredded fir bark mulch because it is attractive, durable and natural-looking. Notice this mulch around you in the Valley-Wise Garden.

Mulched home garden

How do I select mulch?

How much mulch do I need?

How often should I mulch?

Ruth Risdon Storer Garden–A Valley-Wise Garden
Why Should I use mulch?

Mulch protects the soil and improves the appearance of the home garden.

**Mulch reduces**
- weeds by blocking sunlight that weed seeds need to grow
- water needs by protecting soil from losing water to evaporation and run-off
- fertilizer needs by breaking down and adding its own nutrients to the soil
- soil compaction by cushioning the soil below

**Mulch improves**
- appearance by covering bare ground and reducing weeds
- drainage over time by breaking down and improving soil structure
- soil health by adding nutrients to the soil as it breaks down
- plant health by improving soil and growing conditions

How do I select mulch?
Choose:
- Fine or medium-sized mulch
- Pieces less than 2” long
- Shredded bark or wood
- Nut shells
- Pine needles or other tree leaves

How much mulch do I need?
- Small plants: 2” deep
- Large plants, trees: 4” deep
- Pathways and bare ground: 4” deep
- If you spread mulch too thinly, you lose its benefits

How much mulch do I need?
- Appy mulch at least once a year or as needed to maintain an optimum depth of 2-4”.

What is mulch?
Mulch is a protective covering spread on the ground around plants. It improves the health of your garden.

The Arboretum uses medium, shredded fir bark mulch because it is attractive, durable and natural-looking. Notice this mulch around you in the Valley-Wise Garden.

Ruth Risdon Storer Garden–A Valley-Wise Garden

arboretum.ucdavis.edu

Sign made possible by grants from the Elvenia J Slosson Foundation and the UC Davis Office of Administration
Who was Ruth Risdon Storer?

Dr. Ruth Risdon Storer was Yolo County’s first pediatrician and an avid gardener. She shared many of the plants here with the Arboretum and helped to fund this garden. First planted in 1980, this demonstration garden was inspired by Storer’s own home garden. Like her garden, it has year-round color, beauty and requires little maintenance.

Arboretum staff test new plants here for use in Valley-Wise gardens. Explore this garden for Arboretum All-Stars—our top recommended plants.

Valley-Wise gardening uses plants and practices suited to Central Valley conditions

arboretum.ucdavis.edu

Sign made possible by grants from the Elvenia J. Slosson Foundation and the UC Davis Office of Administration
Valley-Wise gardening uses plants and practices suited to Central Valley conditions

Valley-Wise Gardeners
- choose low-water-use plants and have lower water bills
- spend less on chemical fertilizers and pesticides
- use long-lived plants that don’t need regular replacement

Valley-Wise Gardeners
- spend less time on garden maintenance
- spend less time replacing plants
- have less lawn to mow

Who was Ruth Risdon Storer?
Dr. Ruth Risdon Storer was Yolo County’s first pediatrician and an avid gardener. She shared many of the plants here with the Arboretum and helped to fund this garden. First planted in 1980, this demonstration garden was inspired by Storer’s own home garden. Like her garden, it has year-round color, beauty and requires little maintenance.

Arboretum staff test new plants here for use in Valley-Wise gardens. Explore this garden for Arboretum All-Stars—our top recommended plants.
Are Aphids eating your roses?

Instead of using pesticides, try the “buddy system”.

Without Buddy Plants

By growing buddy, or companion, plants around your roses, you can attract beneficial insects that eat aphids and other pests... without using chemicals!

With Buddy Plants

We eat aphids!

Buddy, or companion, plants provide food and/or shelter to adult beneficial insects, encouraging them to lay their eggs near roses. Hungry larvae then hatch and help control aphids and other pests by eating them.

Ladybird Beetle

Larva eats aphids, scales and mites.

Adult eats aphids, scales and mites.

Syrphid Fly

Larva eats aphids, thrips and mites.

Lacewing

Larva eats aphids and small caterpillars.

Adult eats nectar and pollen.

Melissa Borel

Rose bush without buddy plants

Aphid-infested rose

UC IPM

Rose bush with buddy plants

Healthy, aphid-free rose
No. I am a **low-maintenance rose** because I am **disease resistant**.

When you buy roses, look on the label to see if they're disease resistant. This will save you time, money and effort in your Valley-Wise garden.

**High Maintenance**
- Roses without disease resistance are prone to unsightly fungal diseases
- In order to look their best, these roses may require high levels of care and fungicide applications

**Common Fungal Problems in Roses**
- Rust
- Black spot
- Powdery mildew

**Low Maintenance**
- Roses with disease resistance are easier to care for because they are less likely to get fungal diseases
- These roses are beautiful without needing fungicide

**Choose Low-Maintenance Roses**
- *Rosa 'Perle d'Or'*
- *Rosa 'Gruss an Aachen'*
- *Rosa x odoratiss 'Mutabilis'*

Roses with disease resistance are easier to care for because they are less likely to get fungal diseases. These roses are beautiful without needing fungicide.

Sign made possible by a grant from the Elvenia J. Slosson Foundation
Why Is There A moon garden In The Arboretum?

It continues a three thousand year-old gardening tradition

Historically, white flower gardens were used by aristocrats of ancient India, and later by English socialites, for outdoor parties before air conditioning was invented. In order to escape summer heat, parties were held in the evening. White flowers were ideal because they shine in the light of the moon.

It provides a wonderful destination for Arboretum visitors

This garden and gazebo are a beautiful setting for weddings and receptions. For reservations, call Campus Events and Visitor Services (530) 752-2675.

It provides food sources for night-pollinating insects

In the evening, many of the flowers in this garden have a stronger scent that attracts night-pollinating moths.

The sphinx moth is attracted to white flowers by their sweet fragrance and visibility at night. As the moth feeds on nectar, it pollinates the flowers.

The white garland ginger (Hedychium coronarium) from India is a popular moon garden flower because of its tropical fragrance.

Any white-flowering plant is suitable for a moon garden. Some of these scented favorites are found in this garden:

Clockwise from top: summer daphne (Daphne x transcaucasica), southern magnolia (Magnolia grandiflora), argentine rain lily (Zephyranthes candida), and calla lily (Zantedeschia aethiopica).

Who was Carolee Shields?

Carolee Shields was the wife of Judge Peter J. Shields, an early champion of the founding of UC Davis. She is credited with starting the long-standing campus tradition of Picnic Day by hosting the first event in 1909.

After Judge Shields passed away, Mrs. Shields made sure that a bequest from their estate would create the Shields Oak Grove along with this garden and gazebo.

The formal white flower garden was planted in 1976 at the suggestion of Mrs. Shields’ friends, Ruth Risdon Storer and Alyce Jewett.

arboretum.ucdavis.edu

Sign made possible by a grant from the Elvenia J. Slosson Foundation
The Valley-Wise Garden is watered only once every two weeks for seven months of the year (April-October). Winter rains take care of the rest.

It is best to water deeply and infrequently. Deep watering means wetting a plant's entire root zone.

- The drought-tolerant plants in the Valley-Wise Garden get deep watering once every two weeks.
- The water loving plants in the nearby White Flower Garden and Gazebo get deep watering once a week.

Make your irrigation system more water-wise by:
- Learning to use your irrigation controller
- Turning off your watering system during the rainy winter season
- Adjusting irrigation heads to avoid watering sidewalks and pathways
- Using water-efficient spray heads that release less water over time
- Using mulch to reduce water loss

New plantings need more water until their roots have started to grow into the surrounding soil. Plant in the fall and let the winter rains water for you.

Even drought-tolerant plants may need daily water if you plant in the spring or summer.

Plants need the most water during the long, hot days of summer. Turn your sprinklers OFF in the winter; rains provide plenty of water.

Water during the cool morning hours to reduce water loss through evaporation.

NO. The secret to a healthy garden is watering deeply and infrequently. Deep watering means wetting a plant's entire root zone. Constantly wet soil can kill many plants, so allow soil to dry before you water again.

Check how deep the water is getting into soil by using a shovel to gently expose the soil without disturbing plants.

Plants need the most water during the long, hot days of summer. Turn your sprinklers OFF in the winter; rains provide plenty of water.
test Your watering wisdom

The Valley-Wise Garden is watered only once every two weeks for seven months of the year (April-October). Winter rains take care of the rest.

Did you know?
• Most California gardens use more than 50% more water than they need.
• Too much watering is the major cause of plant death in many home gardens.

How much water do my plants need?
How often should I water my plants?
How much should I water my new plantings?
How can I make my irrigation system more water-wise?
What time of day is best for watering?
Do I need to water everyday?
buddy plants
Provide food For Beneficial Insects

Buddy, or companion, plants like seaside daisy and goldenrod attract adult beneficial insects, adding beauty and function to your garden.

We eat aphids!
Syrphid fly adults feed on the nectar and pollen of companion plants. Growing these plants in a location close to roses encourages beneficial insects to lay their eggs nearby. Larvae then hatch and can feed on aphids and other rose pest insects.
We eat aphids!

Ladybird beetles stay safe by taking cover in these companion plants. Growing these plants in a location close to roses provides the beneficial insects with their favorite foods: rose pests such as aphids, scales, mites, and caterpillars.

Buddy, or companion, plants like deergrass and yarrow provide shelter for beneficial ladybird beetles.

Emily Griswold
Ellen Zagory
UC IPM
UC DAVIS
RBORETUM
Ruth Risdon Storer Garden–A Valley-Wise Garden
arboretum.ucdavis.edu

Sign made possible by a grant from the Elvenia J. Slosson Foundation