



Plants for Low Water Landscapes

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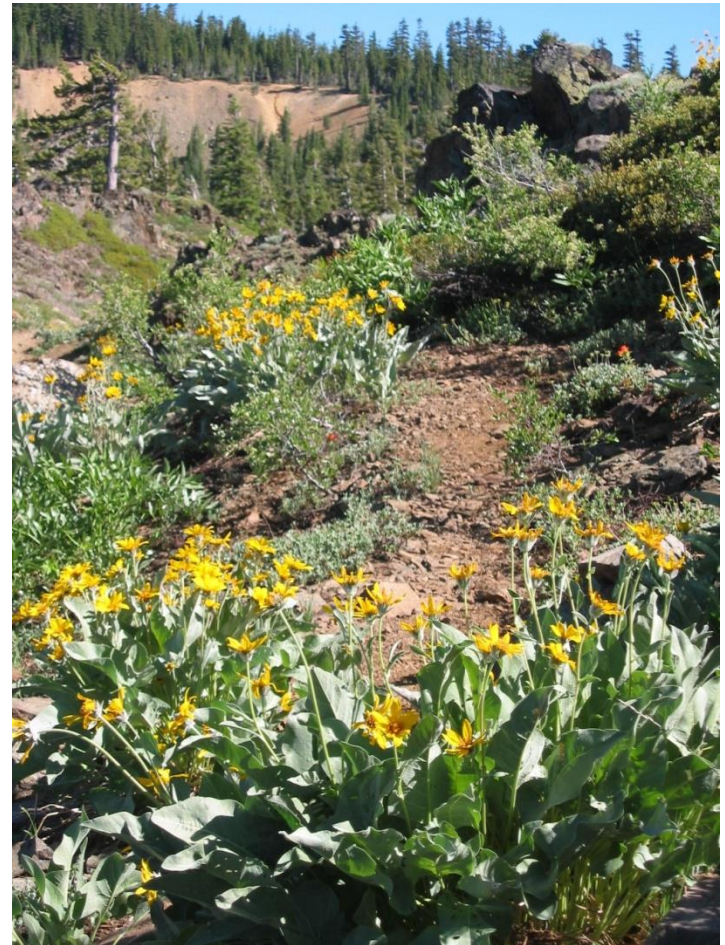
The UC Davis Arboretum

“Connecting People with the Beauty and Value of Plants”

“Landscapes are essential to the quality of life in California....”

- California faces a real challenge to meet the water needs of a growing population with a limited supply of water.
- To meet this challenge, water use in landscapes must be reduced.
- There are many ways to accomplish this goal and even modest improvements can have a cumulative effect in saving water

--DWR website



To conserve water do you have to have a dry-looking garden?



The answer is No!! These plants receive only twice a month irrigation in summer.



6 steps to a water-saving garden

(Adapted from the NYC.gov water agency)

1. Planning & design

- Add **hard surface areas** like patios, decks or walkways that **do not need irrigation** to overall plan.

2. Soil and grading improvements

Mix compost or other organic matter into the soil before planting **to help the soil retain water**. If your yard is sloped, **reduce water run-off** with terraces and retaining walls.

3. Minimize high water turf species

Limit the amount of area devoted to high water turf, use drought-tolerant grass seed mixes when turf is desired.



6 steps to a water-saving landscape



4. Plant selection

Choose **low-water-using trees, shrubs, flowers and groundcovers**. Need watering in the first year for strong root system

5. Efficient irrigation

Invest in a **modern irrigation system** that puts water only where its needed. **Turn it off during the winter**

6. Effective use of mulches

This keeps soil moist, smothers weeds and prevents erosion.

Low Water Landscapes: pick the right plants (or find a contractor who can)

- Select plants that are adapted to summer dry
 - California natives
 - Mediterranean climate plants
 - Low water-use succulents
 - Summer dry bulbs



Spacing of plants in landscapes can also reduce water needs



- Fewer plants share the same amount of water
- Can irrigate less frequently

We wanted to promote 100 of the best of our plants we knew could survive with less water



UC DAVIS
ARBORETUM



All Stars

Encouraging gardeners to choose and use top performing, water-conserving plants.



What makes a plant a UC Davis Arboretum All-Star?

Every All-Star plant must:

- Be attractive for most of the year
- Thrive in Central Valley conditions
- Be tested in the UC Davis Arboretum
- Be available at Plant Sales

All-Stars were also selected for:

- Low maintenance
- Drought tolerance
- Attracting beneficial wildlife
- Year-round interest



UC Davis Arboretum All-Stars program:

Palmer's sedum *Sedum palmeri*



- Deep golden-yellow, star-shaped flowers in spring
- Drought and shade tolerant
- Low growing and can be used as a ground-cover for small areas

Grow it!

PLANT TYPE	perennial
HEIGHT	6-12 in.
WIDTH	1-2 ft.
BLOOM SEASON	March-April
PLACEMENT	full sun or part shade
WATER NEEDS	deep watering once or twice a month
PRUNING NEEDS	little or none
NATIVE TO	Mexico



What is an Arboretum All-Star?

Arboretum All-Stars are our staff's top recommended plants for California gardens.

What makes a plant an Arboretum All-Star?

Each All-Star plant must have the following features:

- Attractive for most of the year
- Thrives in California conditions
- Tested in the UC Davis Arboretum

Many All-Stars also have one or more of the following features:

- Low maintenance
- Drought tolerant
- Attracts beneficial wildlife

Introducing

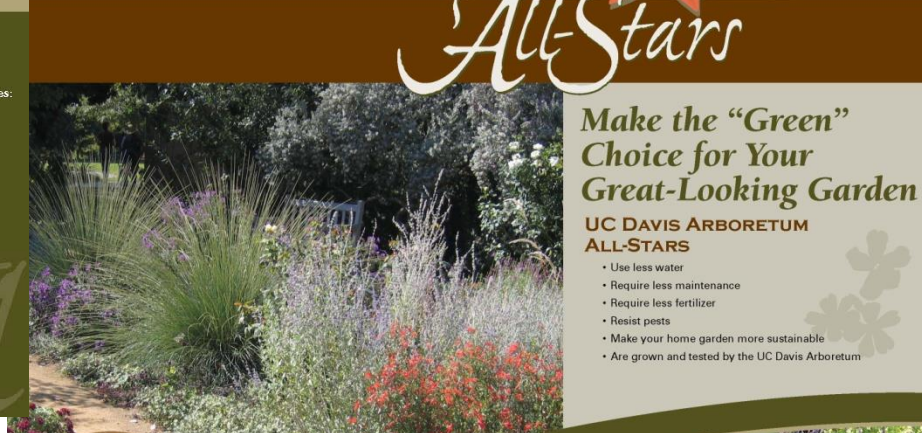
UC DAVIS
ARBORETUM

All-Stars

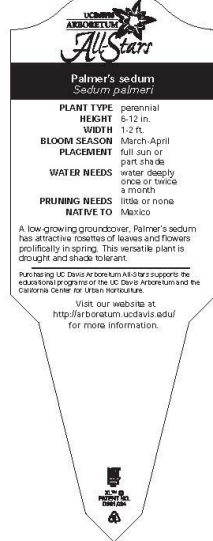
Make the "Green"
Choice for Your
Great-Looking Garden

UC DAVIS ARBORETUM
ALL-STARS

- Use less water
- Require less maintenance
- Require less fertilizer
- Resist pests
- Make your home garden more sustainable
- Are grown and tested by the UC Davis Arboretum



For a complete list of UC Davis Arboretum All-Star plants and landscape designs, please visit our website at <http://arboretum.ucdavis.edu>



Design & Shape Note

Magenta line is the bleed line. Any art that is to bleed must extend to this line. Black line is the cut line.

People's dome Michaelmas daisy
Aster 'Purple Dome'

This striking dwarf daisy blooms profusely in mid to late summer. It's attractive to butterflies, is happiest in full sun and tolerates wet soils. "Purple Dome" does not have any serious pest or disease problems.

Cape balsam
Isotria medeoloides

Cape balsam produces compact spikes of nodding leaves and delicate, yellow flower plumes from fall through spring. It is a hardy plant, tolerating drought and poor soils.

Marie Simon oenothera
Oenothera 'Miss Marie Simon'

Clusters of pink flowers atop numerous stems appear in spring with butterflies and other pollinators visiting frequently. Water-conscious gardeners should welcome Marie Simon as it thrives with little water.

California fuchsia
Coultersonia californica

A native, California fuchsia comes in many different forms, each displaying beautiful orange-red flowers in summer and fall. Hummingbirds love this plant and it gladly tolerates heat and drought.

Wayne Rudwick seaside daisy
Erigeron 'W.R.'

Low growing and great for flower borders, the California native blooms spring to fall with charming daisies. It is very popular with butterflies and does best with afternoon shade in hotter areas of the state.

Goodwin Creek lavender
Lavandula 'Goodwin Creek Grey'

Add fragrance to your garden with this plant. It looks great in groupings of shrubs and always attracts butterflies. Gardeners love this lavender because it tolerates heat and requires little water.

deergrass
Muhlenbergia glabra

A California native, deergrass is a striking accent plant that will add both texture and movement to your garden. It requires almost no maintenance and needs very little water.

Hybrid columbine
Waxeye X fumosus

Hybrid columbine is a low-growing plant with delightful flowers and foliage, enjoyed by both you and butterflies. It tolerates many soil types, requires little water, and flowers from March through October.

Santa Margarita foothill penstemon
Penstemon leucophyllus
'Margarita B.C.P.'

Bring the California hills to your home garden with this native, drought-tolerant plant. The golden buds become intense blue blossoms that charm hummingbirds and other fine ailes.

Palmer's sedum
Sedum palmeri

A low growing groundcover, Palmer's sedum has attractive rosettes of leaves and flowers prolifically in spring. This versatile plant is drought- and shade-tolerant.

Ed Carmichael's rosemary
Rosmarinus officinalis 'Mozart'

A blue flower and small habit set "Mozart" apart from other rosemary selections. Clips in the leaves add fragrance to the garden and the flowers persist from fall to spring. "Mozart" requires little water.

autumn sage
Salvia greggii and Salvia 'James Hill'

These plants flower abundantly in spring and fall, constantly visited by hummingbirds and pollinators. Autumn sages are hard and drought-tolerant, a wise choice for conserving water.



Purchasing UC Davis Arboretum All-Stars supports the educational programs of the UC Davis Arboretum and the California Center for Urban Horticulture. For a complete list of UC Davis Arboretum All-Star plants and landscape designs, please visit our website at <http://arboretum.ucdavis.edu>



home



Arboretum All-Stars



The horticultural staff of the UC Davis Arboretum have identified 100 tough, reliable plants that have been tested in the Arboretum, are easy to grow, don't need a lot of water, have few problems with pests or diseases, and have outstanding qualities in the garden. Many of them are California native plants and support native birds and insects. We are pleased to recommend these great plants for [Valley-wise gardens](#).

Use the [All-Stars database](#) to find the right plants for your garden.

[Click here](#) to browse through the 100 UC Davis Arboretum All-Stars.

When you visit the Arboretum demonstration gardens, you will see a series of beautiful, brightly-colored signs identifying the Arboretum All-Stars, each with a photo of the plant in bloom, a list of its outstanding features, and information about how to grow it. Also look for metal plant labels with the All-Stars logo.

Many of the All-Stars plants are available at Arboretum [plant sales](#) and will be available through many local retailers starting in spring 2009. Look for the All-Stars symbol on the plant tag. Coming soon: demonstration plantings of Arboretum All-Stars at the new Arboretum Teaching Nursery.

Click on the links below to download brochures about the Arboretum All-Stars plants:

Get a PDF of the 24-page [Arboretum All-Stars Booklet](#), a full listing of all 100 All-Stars with detailed information on each.

If you are unable to get the entire 24 page booklet, try downloading parts of it:

- [All-Star Perennials](#), pages 1-11
- [All-Star Groundcovers and Vines](#), pages 12-13
- [All-Star Shrubs](#), pages 14-21
- [All-Star Trees](#), pages 20-24

Find out which All-Stars are [California natives](#).

While the All-Stars all use less water, these plants are [water misers](#).

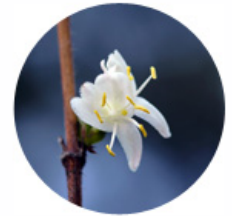
Want to attract hummingbirds, bees, or beneficial insects? [These plants](#) will meet your goals.

PLAN YOUR VISIT

- VALLEY-WISE GARDENING
- EDUCATION & RESEARCH
- GATEWAYS PROJECT
- SUPPORT
- VOLUNTEER

- Arboretum All-Stars**
- All-Stars Plant Search
- Plant Sales/ Nursery
- Gardening Reference
- Resources

- ABOUT US
- CALNDAR
- ARBORETUM ALL-STARS
- MEMBERSHIP
- NEWS





All-Stars Plant Search

Plant Name:

Type: Tree Shrub Groundcover Vine Perennial

Size: Small Medium Large

Exposure: Full Sun Part Shade Shade

California Native

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Salvia apiana - California white sage
California native plant; spring flowers attract pollinating bees; leaves contain fragrant oils.
[More Details](#)



Salvia clevelandii 'Winnifred Gilman' - Winnifred Gilman Cleveland sage
California native plant; evergreen shrub produces maroon-stemmed, blue-violet flowers; heat and drought tolerant; attracts hummingbirds, butterflies and beneficial insects.
[More Details](#)



Salvia greggii and Salvia x jamensis - autumn sage
Showy flowers attract hummingbirds and beneficial insects; flowers profusely in the spring and fall.
[More Details](#)



Salvia microphylla - mint bush sage
Leaves have a fruity smell; good for growing under native oaks; thrives with little care in sun or part shade; attracts hummingbirds.



- ABOUT US
- CALENDAR
- ARBORETUM ALL-STARS
- MEMBERSHIP
- NEWS

California Lilac

- *Ceanothus maritimus* 'Valley Violet' (low)
- *Ceanothus* 'Concha' (low)

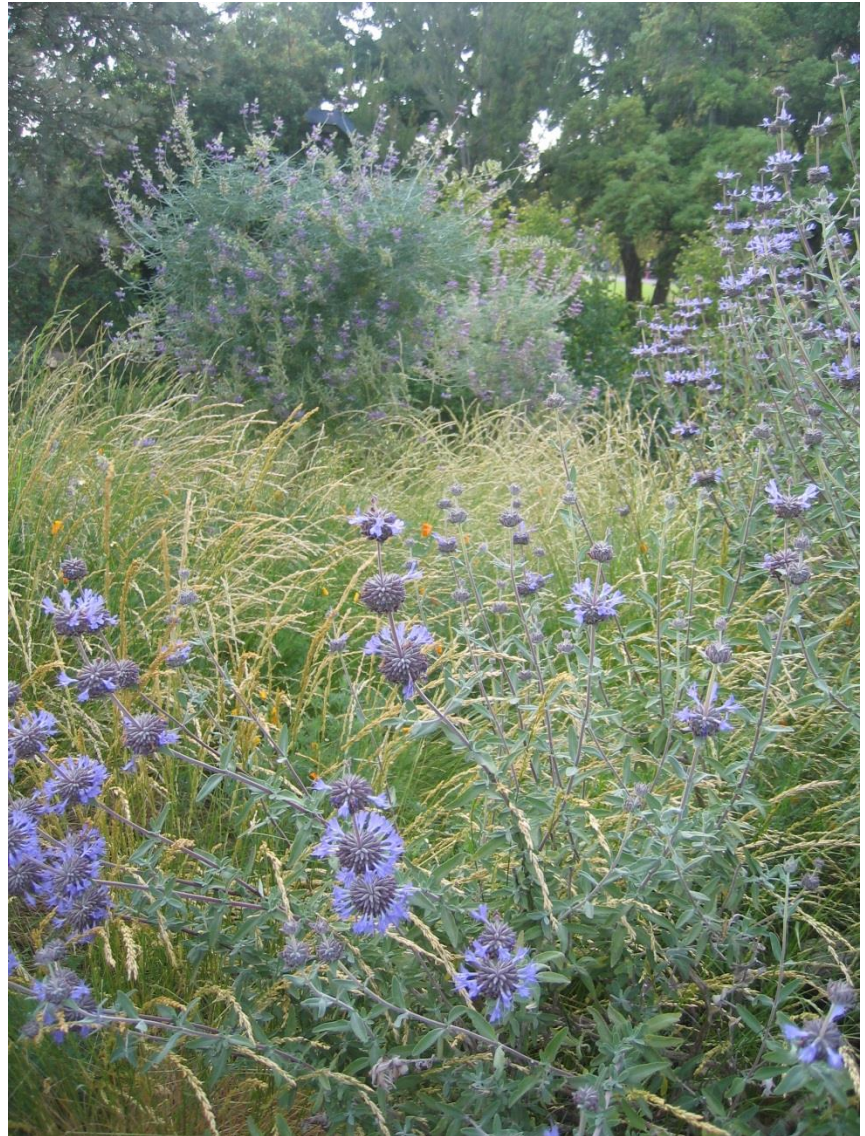


Eriogonum giganteum St. Catherine's Lace (v. low)
beneficial insectary plant



Salvia clevelandii (low)

nectar for butterflies and hummingbirds



Compatible non-native drought-tolerant shrubs

- *Isomeris arborea* bladderpod
(very low) (20% KO)
- *Callistemon violaceus* (low)





Leucophyllum
frutescens (low)
ceniza, barometer bush



Plants for winter bloom

Lonicera standishii winter honeysuckle (not listed)
Kniphofia 'Christmas Cheer' Christmas torch lily (low)



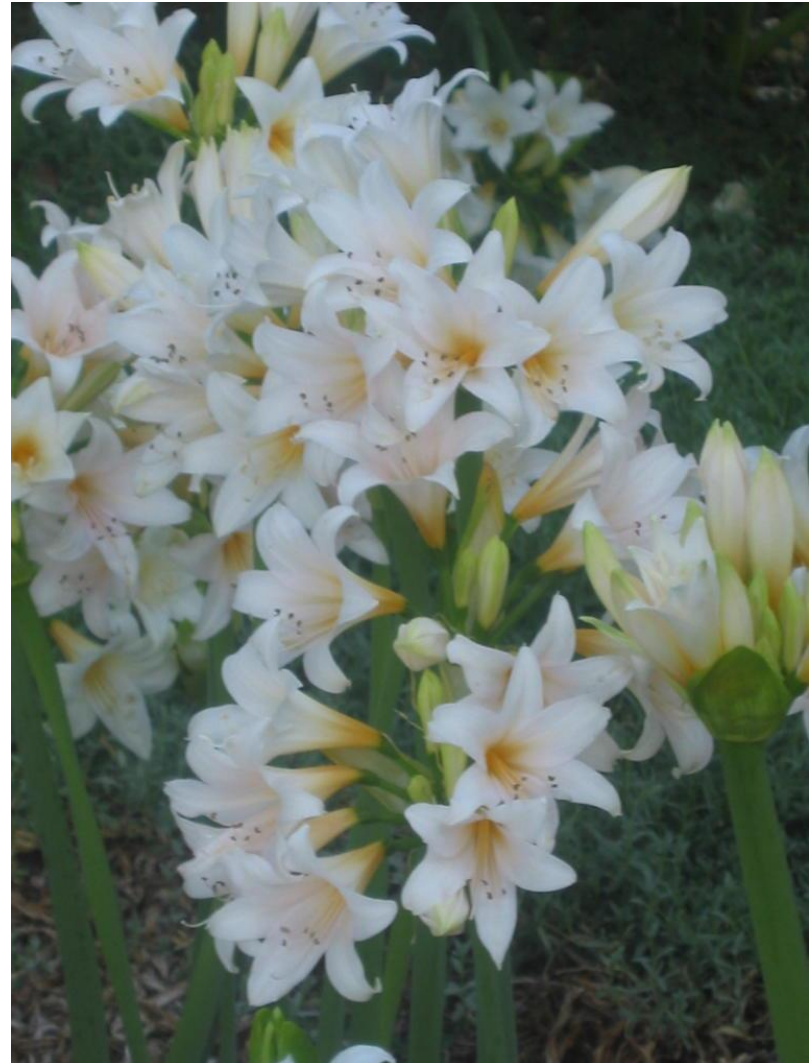
Bulbs

Sternbergia lutea yellow autumn crocus (v. low)

Rhodophiala bifida oxblood lily (low)



Combine with other dependables: *Narcissus* and
Amaryllis (v. *low*)



Mixing natives with compatible non-natives:
Heuchera 'Rosada' (not listed, all levels)



Plants native to the Mediterranean are compatible with Arboretum All-Stars



Some All-Stars support pollinators and other insects

For **Insects they provide food**

- Larval food plants
- Nectar
- Pollen
- Attract other insects



All-Stars support diversity

for **Birds provide food:**

- Insects: attract pollinators and other insects
- Fruits for birds
- Nectar for hummers and butterflies



Phacelia

Epilobium canum

California Native Gardens

- Requires an appreciation of “golden” in summer
- Too much “golden” can be overcome by use of “hydrozones”
- Mixing evergreen and deciduous plants.



Why people don't use more natives?



- Some natives are prone to summer dormancy
- Others dislike heavy clay soils



But do California Native plants need less water? It depends...



Some may be native to wet areas and not drought tolerant



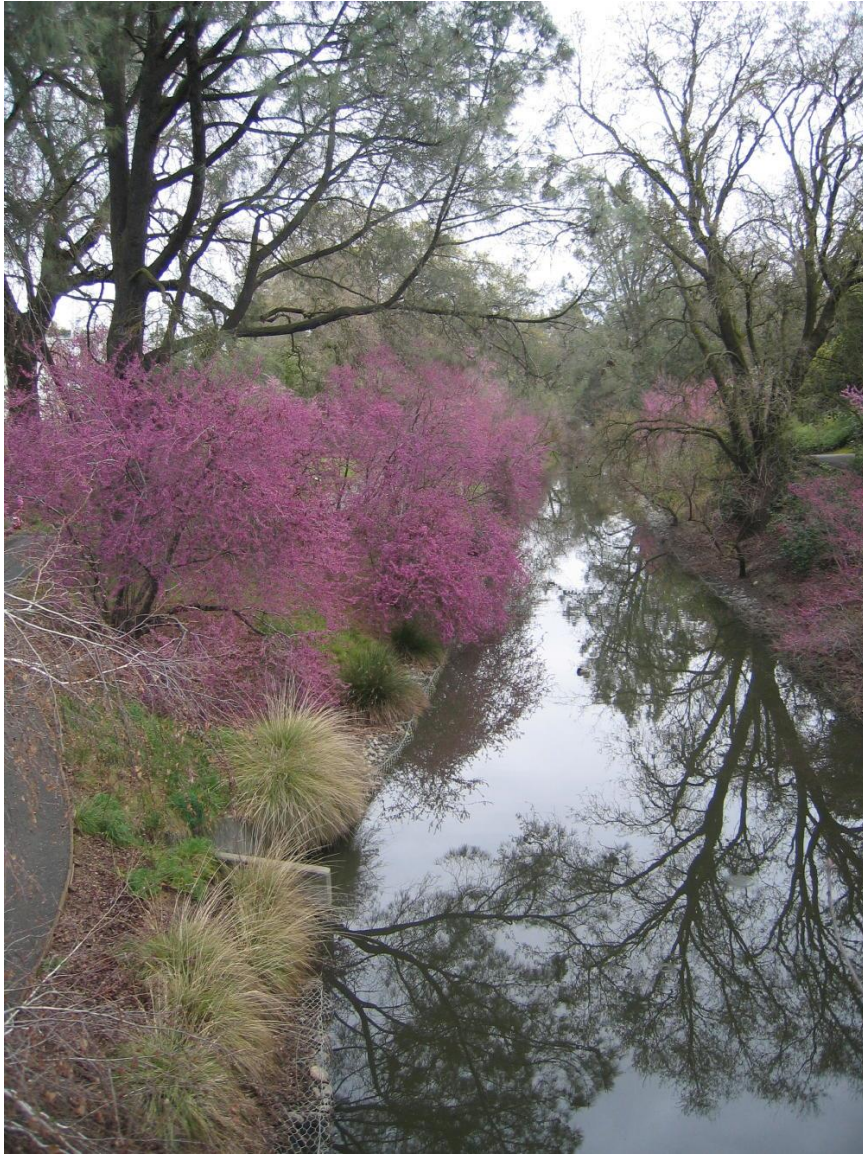
- Areas with coast fog
- Along rivers
- Along ponds

For the most part the plants in the Arboretum are drought
tolerant natives

Ceanothus 'Ray Hartman' (low)



western redbud
Cercis occidentalis (v.low)



Toyon

Heteromeles arbutifolia (v. low)



Salvia apiana (low)
bee sage





*Eriogonum
fasciculatum*
(v.low)

buckwheat

there are prostrate forms too





California fuchsia
Epilobium canum (low)
comes in many shapes and sizes



Low water California native shade garden



Gardening under native oaks



Large shrub for background

Calycanthus
occidentalis

spice bush (low)

Likes shade



Heuchera maxima, Island alum root (low)



Low water landscape under an interior live oak (with rushes and deer grass)



Heuchera 'Rosada'

hybrid of CA native with AZ red flowering species



Ribes viburnifolium, evergreen currant (low)



match the need for sun or shade and combine with
plants from similar climate regions:

Australia

Grevillea 'Scarlet Sprite' (low)



Mexico

Salvia X jamensis 'Scott's Red'
autumn sage (low)



Mexico:
Russelia equisetiformis, coral fountain



South Africa

Kniphofia 'Shining Sceptre' & *Bulbine frutescens* (low)



Mediterranean perennials

Lavandula varieties

Lavandula ‘Goodwin Creek Gray’

Lavandula angustifolia ‘Munstead’



Ornamental oreganoes (medium to low)



Origanum
'Betty Rollins'



Origanum libanoticum Lebanese oregano



Origanum 'Hopleys'



Phlomis fruticosa 'Compacta' (low)





Phlomis purpurea (low)



Salvia officinalis, culinary sage (low to medium)



Nepeta X faassenii catmint (low)



Grasses and Grass-like Plants

Calamagrostis 'Karl Foerster' (low) 20%



Miscanthus sinensis
'Morning Light'
(medium)





The UCD Arboretum has demonstration gardens: Ruth Storer Garden



Irrigation twice a month



We focus on year-round seasonality of mixed
plantings:
Allium bed April



Same bed in September



Arboretum Terrace Garden: has very compacted soils and more shade



UCD Arboretum demonstration plantings to help us to learn as well as teach visitors about low water plants



Using California natives draws a variety of creatures



And low water plants can be combined to create a more sustainable, regional look



The toughest are being tried in medians with only annual maintenance



Mixing perennials, tough grasses and dramatic sculptural plants



Please come to visit in person or online
<http://arboretum.ucdavis.edu>



Get ideas and see examples for creating a low water landscape



Help conserve our precious water supplies



“ A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community”—Aldo Leopold

