

Garden Planting for Bees

(and other pollinators)

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The UC Davis Arboretum

“Connecting People with the Beauty and Value of Plants”



Home gardens and decorative landscapes provide important opportunities for pollinator support



- Usually have a method of summer irrigation-expanding the list of potential plants for gardeners
- Mixture of flowering shrubs, perennials and grasses ideal
- Low water and low maintenance plants are best to conserve resources

Why convert to pollinator supporting landscapes?



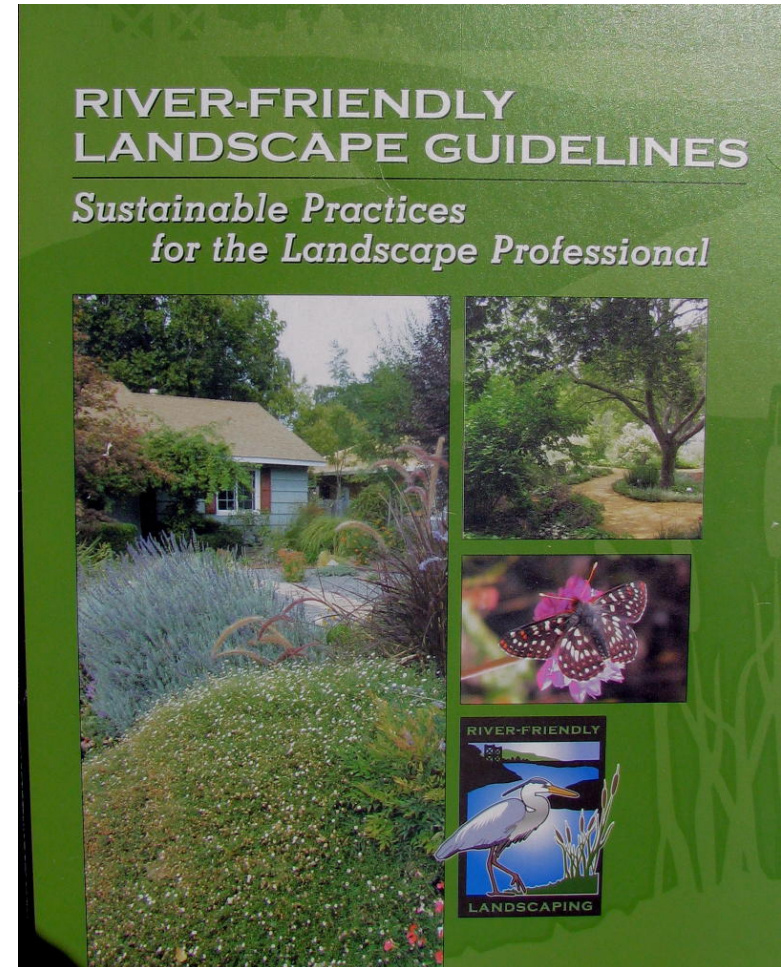
“Gardens can provide oases of safe habitat for migration through ‘deserts’ of concrete or intensively cultivated farmland”

Royal Horticulture Society *The Garden* April 2012

When selecting plants for pollinator support: Consider also Green Gardener/River-friendly practices

- Select low water plants
- Size plants to fit your space-
send less to the landfill
- Eliminate high water (low
diversity) lawns
- Use native plants as much as
possible
- Choose nectar and pollen plants
for pollinators and beneficial
insects
- Reduce or eliminate pesticide
use

<http://www.msa.saccounty.net/sactostormwater/RFL/>



Recommended plants that are successful at the UC Davis Arboretum



- 100Arboretum All-Stars
- Incorporates native and non-native plants
- Some better pollen and nectar than others

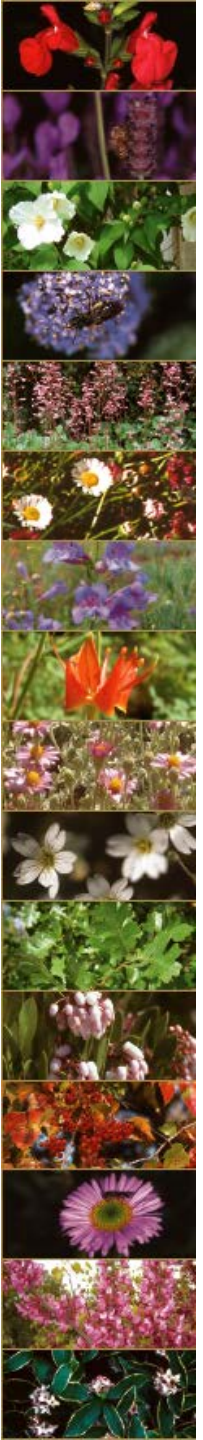
What makes an All-Star?

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



Native plants are preferred when feasible
since they evolved with native insects



All-Stars focus on **perennial** not **annual** plants: both herbaceous and woody

- Native annuals go dormant (turn brown) in summer. Spring focus.
- Tend to become weedy since mulch is not used—higher maintenance



All-Stars and other plants can provide a long season bloom: Teaching nursery demonstration

- Pollinator support: a succession of spring, summer and fall blooming plants
- Diversity of plants will invite a diversity of insects and other creatures



Ruth Storer Garden: deep infrequent irrigation

Rosa 'Gruss An Aachen', *Lavandula stoechas* 'Otto Quast', *Salvia greggii*, *Nepeta*



Seasonality of mixed plantings: Allium bed April



Same bed September 2007



Mixing California natives with drought tolerant non-natives

Deer grass

*Muehlenbergia
rigens*

Spanish lavender

Lavandula stoechas
'Otto Quast'



Teaching Nursery plantings to attract and observe insect visitation—pollinator bed



Other planting themes are nectar for hummingbirds and butterflies -- also attract carpenter bees and honeybees



We have seen a diversity of pollinators so far



Many visitors



- European honeybee
- Valley carpenter bee
- Bumblebees
- Small native bees
- (also hummingbirds, butterflies and predatory insects)

At plant sales the beds are used as educational tools about pollinator plants and invertebrate conservation



Woody plants useful to form the backbone of a planting that also uses grasses and herbaceous perennials



deer grass

Muhlenbergia rigens

maritime ceanothus

Ceanothus maritimus

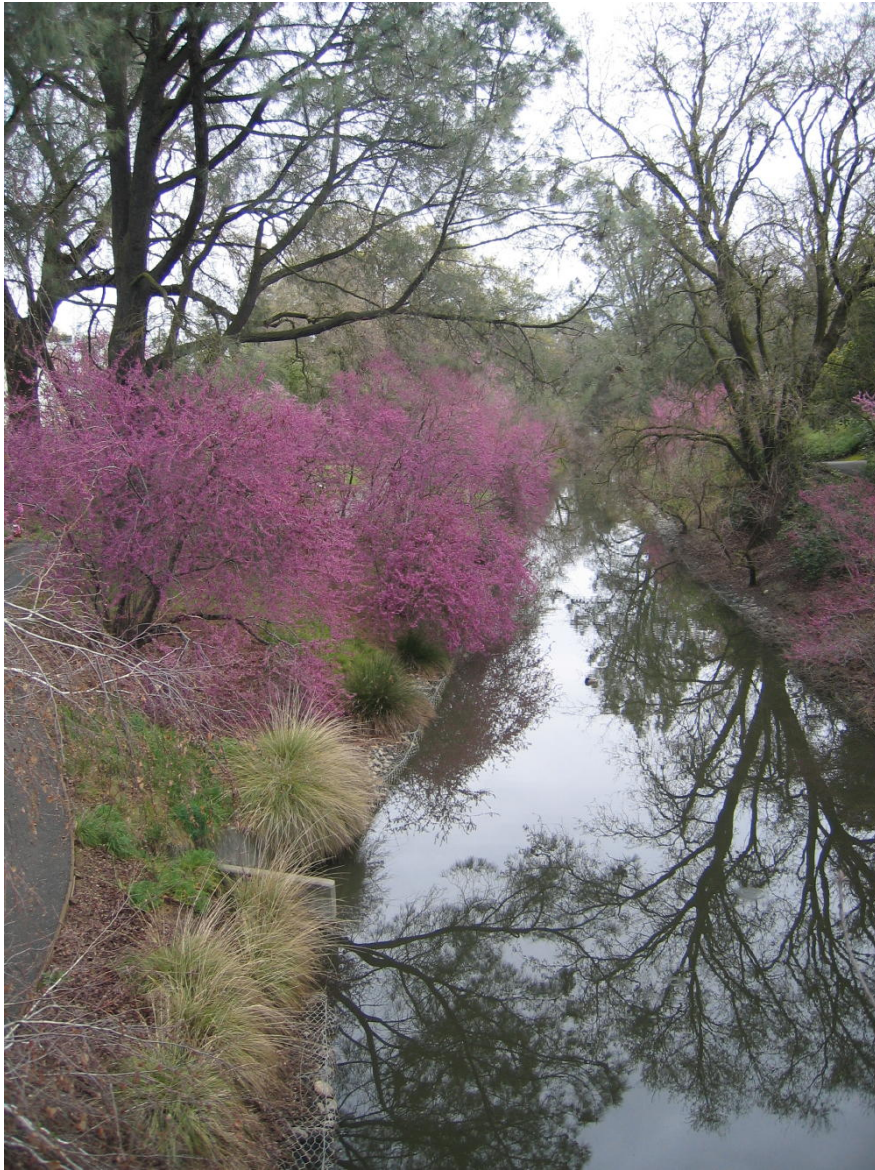
California fuchsia

Epilobium canum

Woody plants for native bees:
Cercis occidentalis, redbud



Western redbud: native to the Putah Creek watershed “native here”



Toyon

Heteromeles arbutifolia



Ceanothus 'Ray Hartman'



California Lilac

- *Ceanothus maritimus* 'Valley Violet'
- *Ceanothus* 'Concha'



Ribes aureum
golden currant



And plants for wintering hummingbirds

Ribes, wild currants



Arctostaphylos densiflora 'Howard
McMinn'



Arctostaphylos pajaroensis



Berberis aquifolium 'Compactum'

- shiny, evergreen
- Yellow flowers in spring
- A number of different varieties available



Other non-native drought-tolerant shrubs

- *Isomeris arborea* bladderpod
- *Callistemon violaceus*



Smaller shrubby plants: buckwheats

Eriogonum grande var *rubescens*



Eriogonum grande var. *rubescens*
pink buckwheat



Eriogonum giganteum St. Catherine's Lace



Eriogonum fasciculatum
California buckwheat



subshrubs native and non-native compatible
Salvia clevelandii , *Lavandula angustifolia* ‘Munstead’



Lavandula ‘Goodwin Creek Grey’



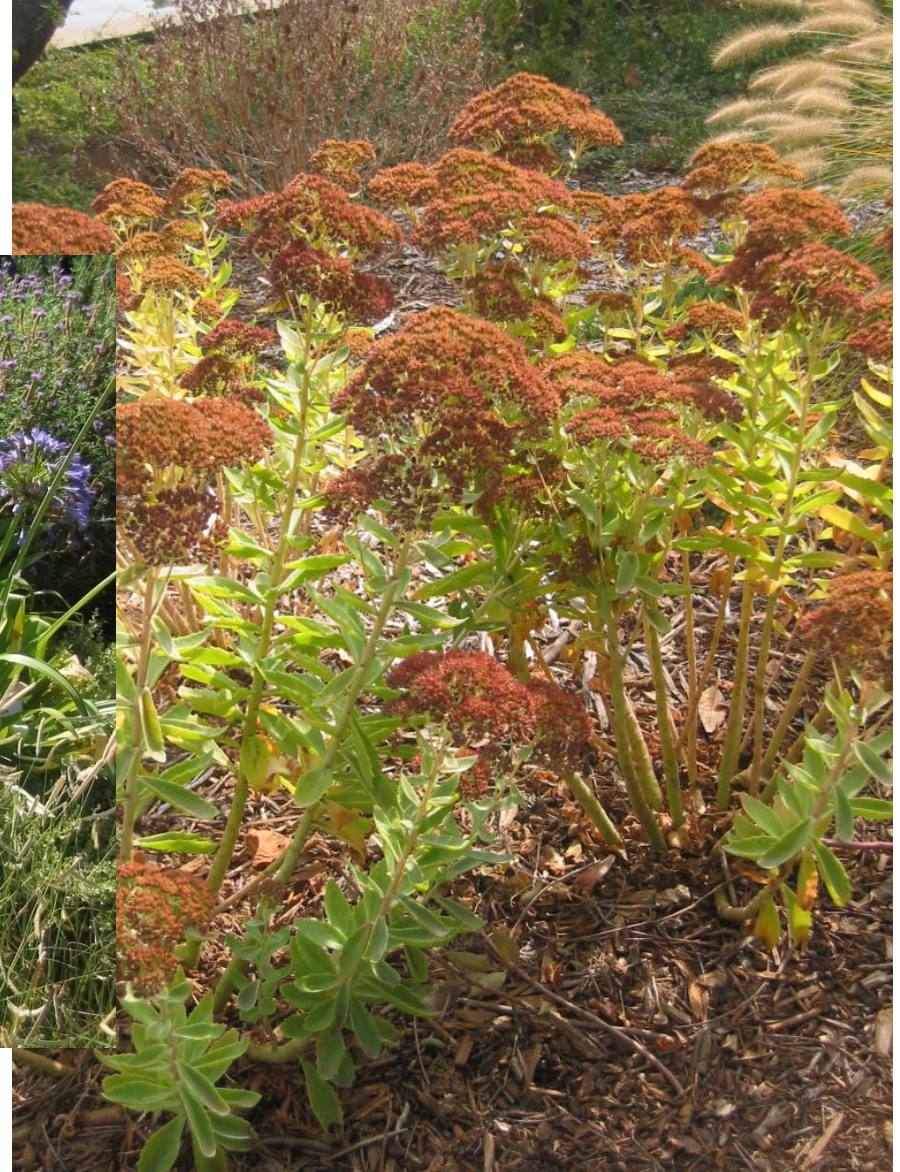
Smaller plants woody at the base “sub-shrubs”
Salvia greggii, many colors and cultivars



“true” herbaceous perennials and grasses do not have woody bases and are cut to ground in winter
(*Achillea* and *Aster*)



Sedum 'Autumn Joy' excellent to attract a variety of insects



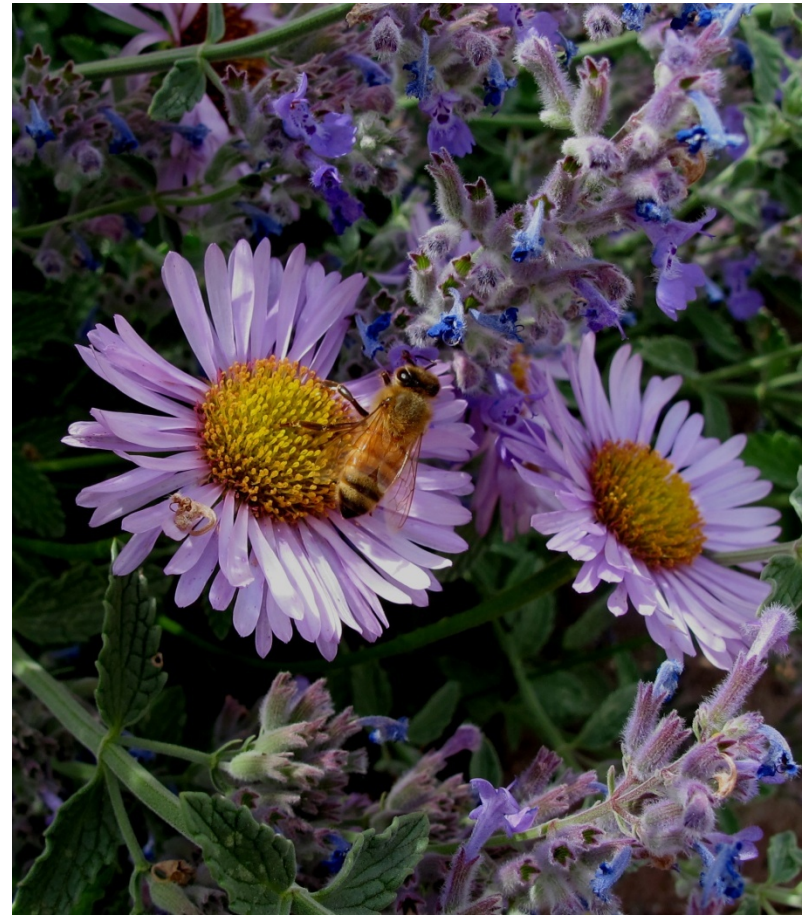
Oreganos like 'Santa Cruz', 'Betty Rollins' with native deer grass
and lessingia



One of the best is seaside daisy: *Erigeron* 'W.R.'



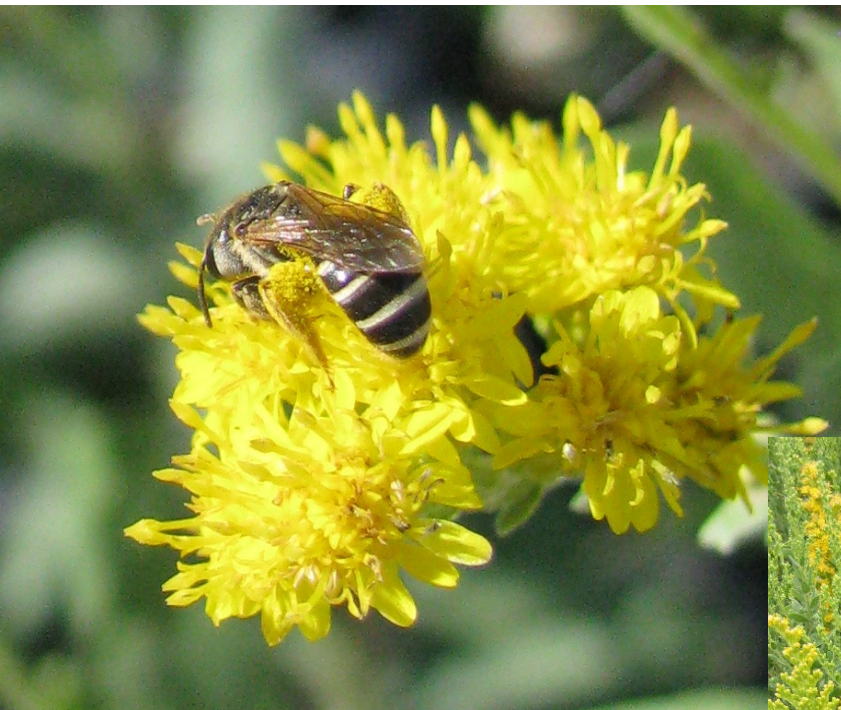
Popular with many bees



Seaside daisy (*Erigeron* 'W.R.') attracts a variety of visitors over the season



for later season bloom: Goldenrod and asters



Solidago
'Cascade
Creek'



Aster 'Purple Dome'



Epilobium canum, California fuchsia



Native California grasses

Festuca californica California
fescue



Blue grama grass *Bouteloua*



Other All-stars help provide long season of flowering

Sedum palmeri, *Bulbine frutescens*, *Salvia greggii* and Aster 'Purple Dome'



Beneficial insects will also be attracted and contribute to your natural pest control

Hoverflies/syrphid flies



And beetles will help eat aphids



Other insects, like butterflies, may visit



larval food plants: milkweeds for monarch larvae



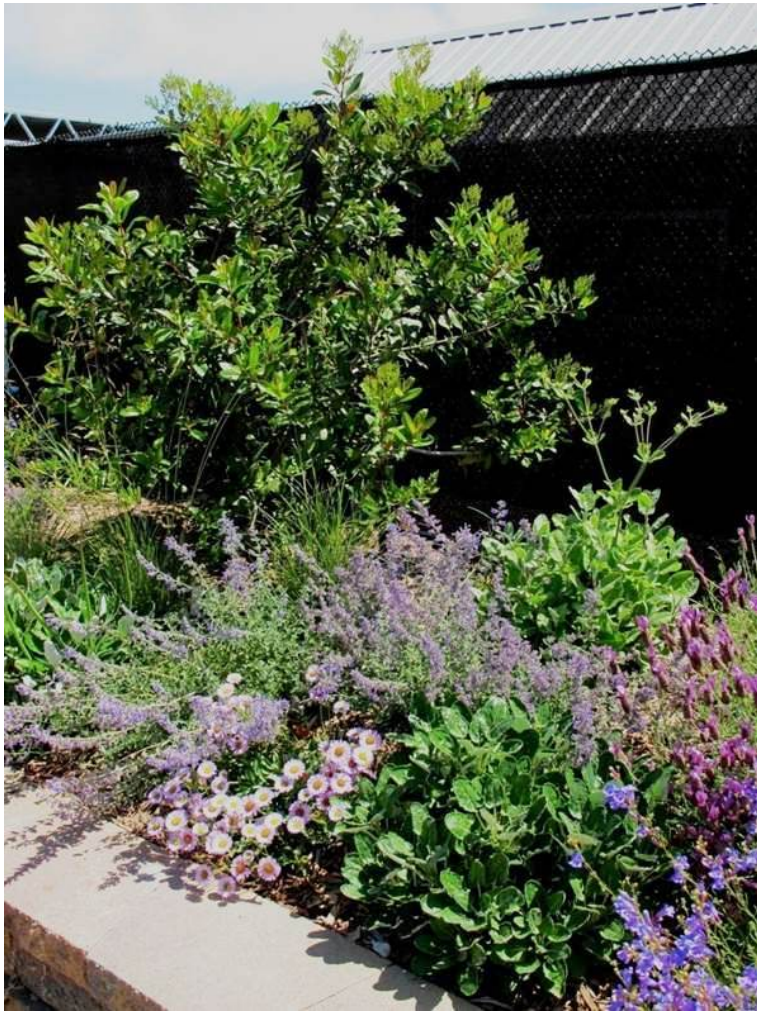
California pipevine
for swallowtail
larvae



Hummingbird visits are daily on both native
and non-native salvia



Combinations of Mediterranean and California plants **early season**



- Spanish lavender (*Lavandula* ‘Otto Quast’)
- Catmint (*Nepeta X faasennii*)
- Toyon or Christmas berry (*Heteromeles arbutifolia*)
- Seaside daisy (*Erigeron* ‘W.R.’)

Natives can be arranged in pleasing combinations: **late season**



goldenrod

Solidago 'Cascade Creek'

pink buckwheat

Eriogonum grande var.
rubescens

California fuchsia

Epilobium canum

Create a beautiful, low water, pollinator supporting, all season garden by combining compatible plants



Where can I find out more?

- **The Xerces Society** (info@xerces.org)
 - Fact sheets: California plants for natives\ bees and butterflies
 - Booklet: Pollinator-friendly Parks
- **California Native Plant Society**
 - plant lists for Central Valley gardens
- **Ecolandscape California**
<http://www.ecolandscape.org/>
Upcoming events and conferences, CNPS plant list and resource list

Visit our website at
<http://arboretum.ucdavis.edu>



home



Welcome to the UC Davis Arboretum

The Arboretum gardens are open 24 hours a day, every day of the year, and there is no charge for admission.

The Arboretum has something for everyone:

- 100 acres of beautiful [gardens](#) for active recreation or peaceful contemplation
- Documented [plant collections](#) for teaching and research
- [Exhibits](#) and demonstration plantings where visitors can learn about sustainable gardening for the Central Valley
- [Guided tours and family programs](#) led by UC Davis experts
- [Plant sales](#) with great plants for Central Valley gardens
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[Sign up](#) for our e-mail newsletter, *The Leaflet*. Please write LEAFLET in the subject line.

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- **Spring Friends membership drive and drawing! Join or renew between 3/1/14 and 5/17/14 to be eligible for**

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Questions?

