### California Native Plants

Adding Them to Your Garden



### Why grow California Natives?

- Native gardens become expressions of our environmental values e.g. water conservation and habitat restoration
- Native plants help native creatures by providing food: leaves, fruit, seeds, nectar, pollen and other creatures (attract insects).
- Because they are beautiful -- bring a little of the wild where we can see it every day

### Native plants support diversity

- Landscaping with native plants increases the resource base for native insects
- Using a greater diversity of plants provides for a greater diversity of insects
- Greater numbers and diversity of insects supports more birds, insectivorous animals and beneficial predatory insects



## Native Landscapes Promote Sustainability

- Plants link to the surrounding wildland ecosystems providing more resources for creatures.
- Give local landscapes a unique style and promote "sense of place"
- Helps people value, and thus work to protect, plants and habitats.

# Why aren't there more California Native Plants in our Landscapes?



### Lack of Availability

- They have historicallyt not been widely available in commercial nurseries
- Propagation and production protocols are not worked out yet—hard to mass produce
- Local by nature they are not marketable across the nation.

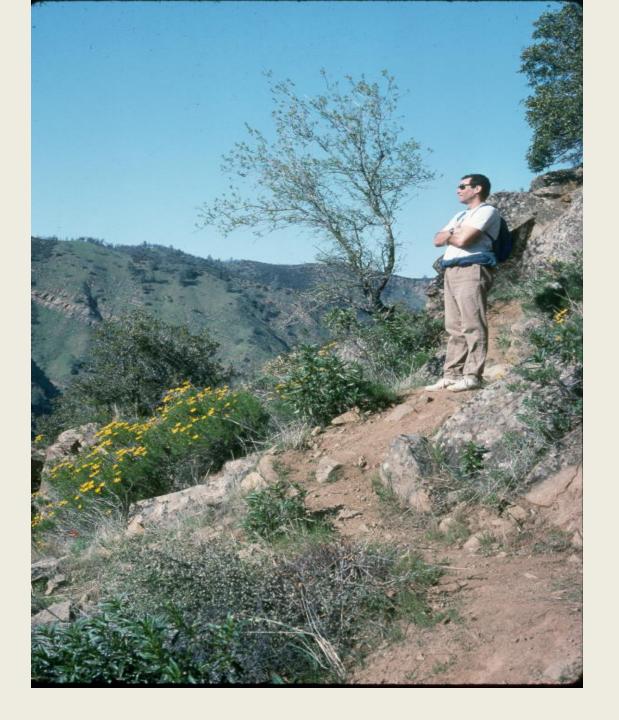


## Lack of readily available information

- Many California native plants have not been selected for tolerance of cultivation.
- Abundant water availability
  has allowed the use of more
  lush plants that need
  summer water.
- The needs of Natives may be incompatible with those of non-natives



Many common natives need well drained soils



### Native plants in Gardens

- Heavy soils in the Valley can hold too much water in the winter and limit oxygen to roots.
- With poorly drained soils it is important to use grading to make slightly raised areas so water doesn't collect around the root crown.



### Not all California native plants have the same water needs

- Plants from coastal areas are used to cooling summer fogs and moister soils
- Interior natives from rocky areas may require summer dry



## Interior natives are frequently more drought tolerant

Cercis occidentalis redbud



#### Success with Native Garden Plants

- Many recommendation lists are written for coastal gardens with cooling summer fog
- These plants require shade from the hot afternoon sun to flourish in the Valley

Salvia spathacea

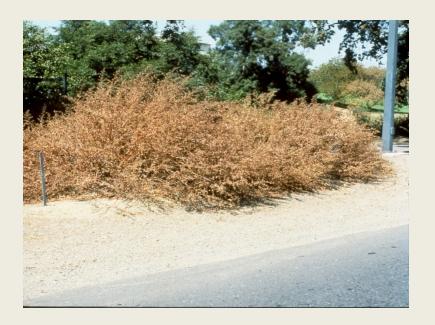


### Adaption to summer drought



 Some natives have given the group a bad name by being prone to summer dormancy

(Ribes sanguineum and Keckiella)



#### **Native Gardens**

- Require an appreciation of "golden" in summer
- Too much "golden" can be overcome by use of "hydrozones"
- Important to carefully mix evergreen and deciduous plants.



## Native annuals can be easy, showy alternatives

- Annuals are not the lowest maintenance
- Need to be cut down in summer
- Let seed drop or collect and sow in fall

Lupinus microcarpus var.

densiflorus 'Ed Gedling'

Davis golden lupine

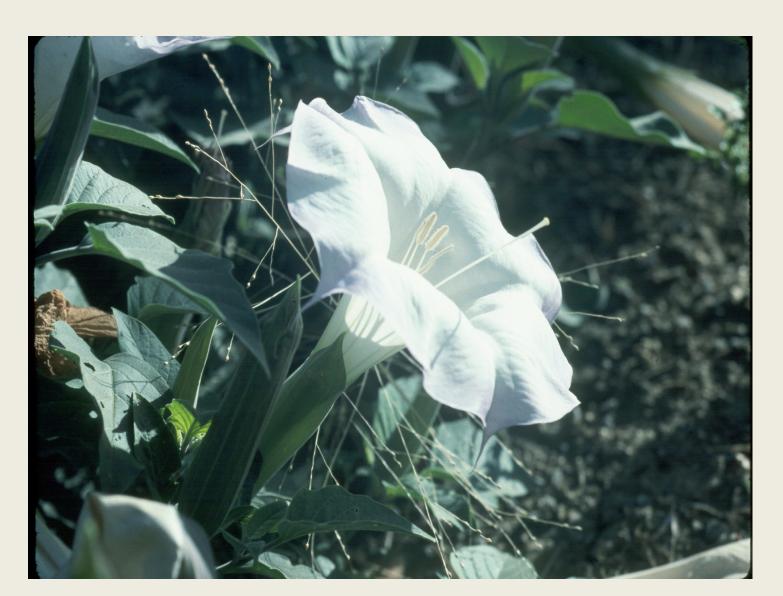


### Can require extra weeding



### Some spread actively from seed

Datura wrightii, tolguacha



### Especially some grasses

Melica californica



## Managing these plants requires different methods Purple needle grass Nassella pulchra



## These can be used to create meadow-like landscapes



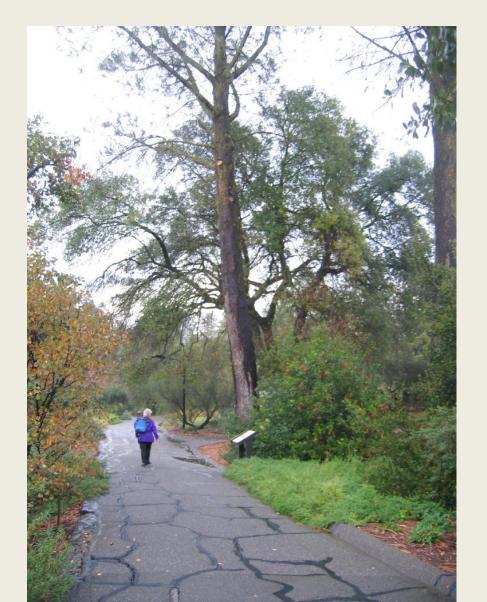
### Where can I see California native plants in a garden? Mary Wattis Brown Garden of California Native Plants

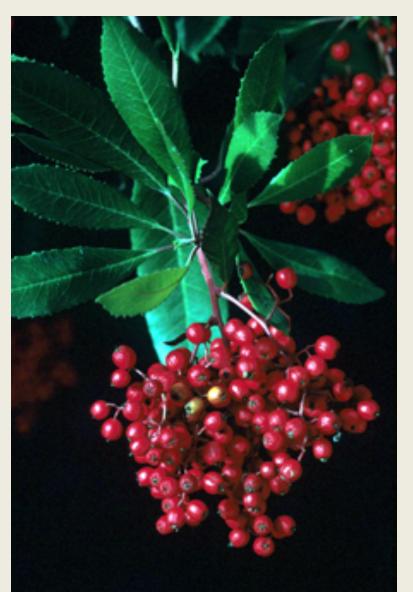


### Every two week summer irrigation



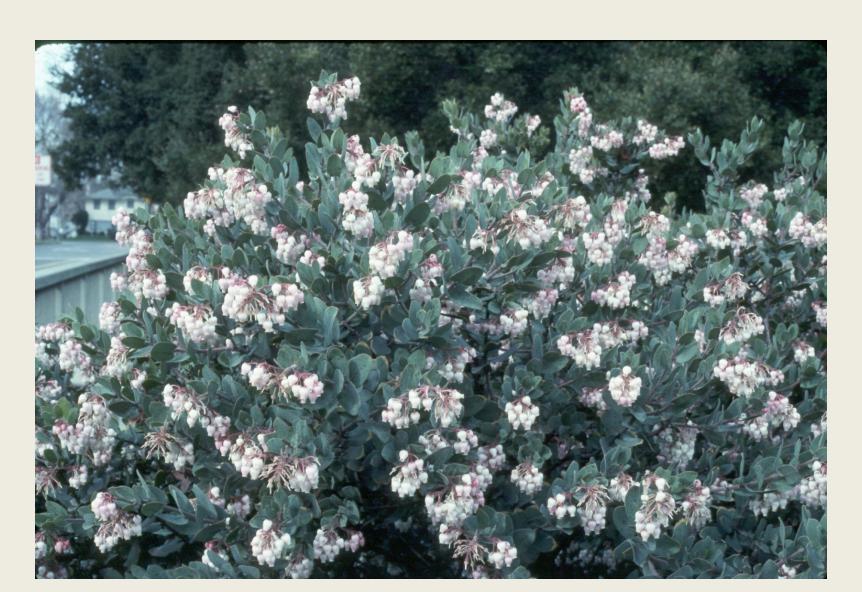
### Toyon *Heteromeles arbutifolia*

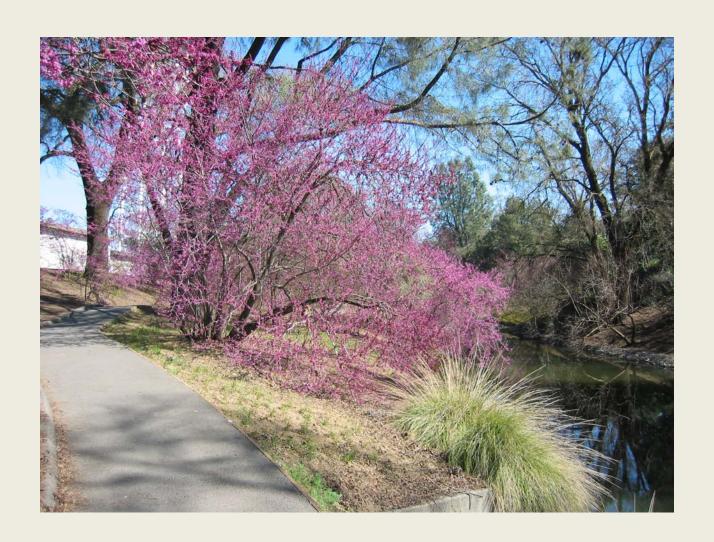




### Many support wildlife

Arctostaphylos, manzanitas





### Some natives prefer shade

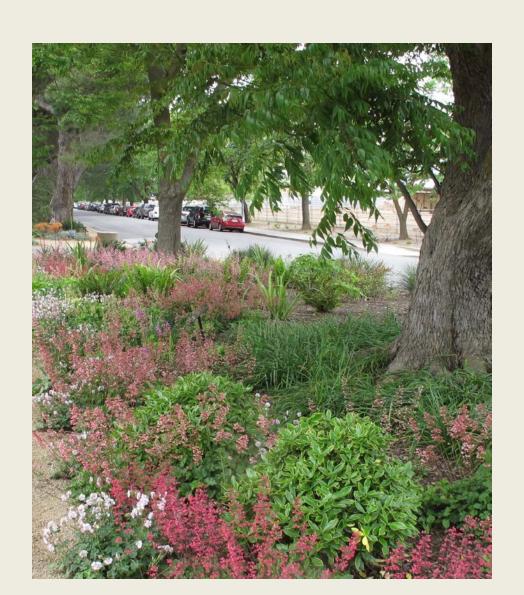
making them useful for under oaks



#### Island alum root Heuchera maxima



### Other native hybrid coral bells

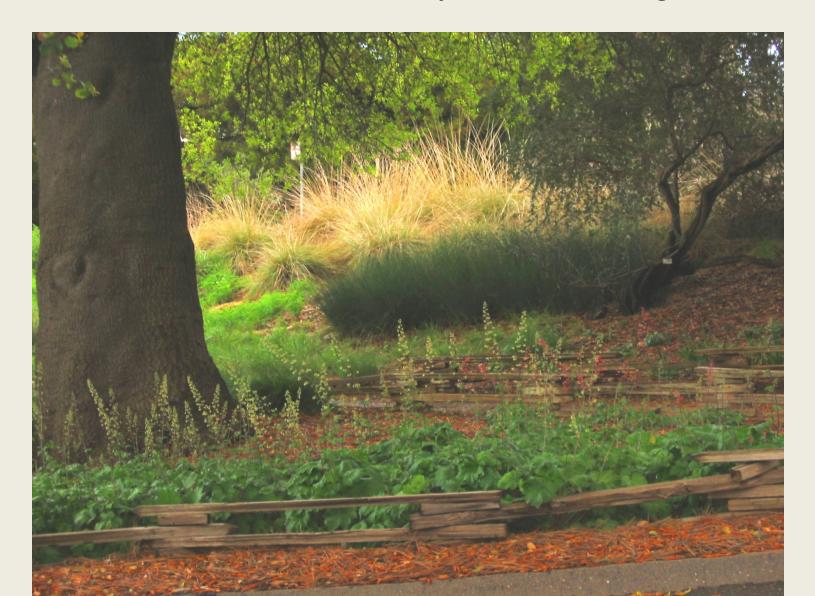


#### *Iris douglasii*, Douglas iris Pacific Coast Hybrid 'Canyon Snow'





#### Simple and elegant planting with natives Interior live oak, alum root, juncus and deer grass



If you can plant some plants to provide food for butterflies

Asclepias speciosa showy milkweed



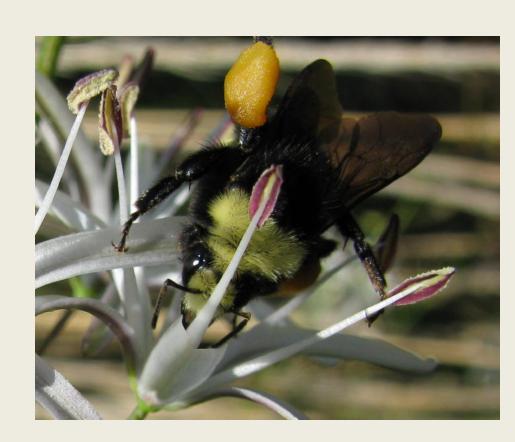






#### Native plants are also important for native bees

- Shortage of European honeybees for crop pollination due to Colony Collapse Disorder.
- Native bees found to make up a high proportion of bee visits in certain crops
- Proximity to native habitat increase number of bee visits



Kremen et.al. 2002

#### There are old and new native sages Salvia apiana bee sage



### Natives to attract Hummingbirds

- Particularly like red, tubular flowers
- Lap nectar from a variety of native and non-native plants
- Need complex habitat like other birds



Epilobium canum, California fuchsia Salvia spathacea, hummingbird sage





#### California fuchsia *Epilobium canum*



### What about combining Natives with other plants?



- Pair natives with plants from other summer dry regions
- Expands the possibilities you can create
- Helps with more evergreen plants for structure

## Native perennials and shrubs with Mediterranean plants



#### More mixing California natives with drought tolerant non-natives

Deer grass

Muehlenbergia

rigens

Spanish lavender

Lavandula stoechas

'Otto Quast'



## Combining Mediterranean and California plants Salvia clevelandii Lavandula angustifolia 'Munstead'





#### Native color mainly in spring.

Add color year-round with other drought tolerant

plants





Fall blooming: asters sages CA fuchsia

Come to the Arboretum to see more examples
Ruth Risdon Storer Garden



Rosmarinus officinalis rosemary



#### Sedum 'Autumn Joy'

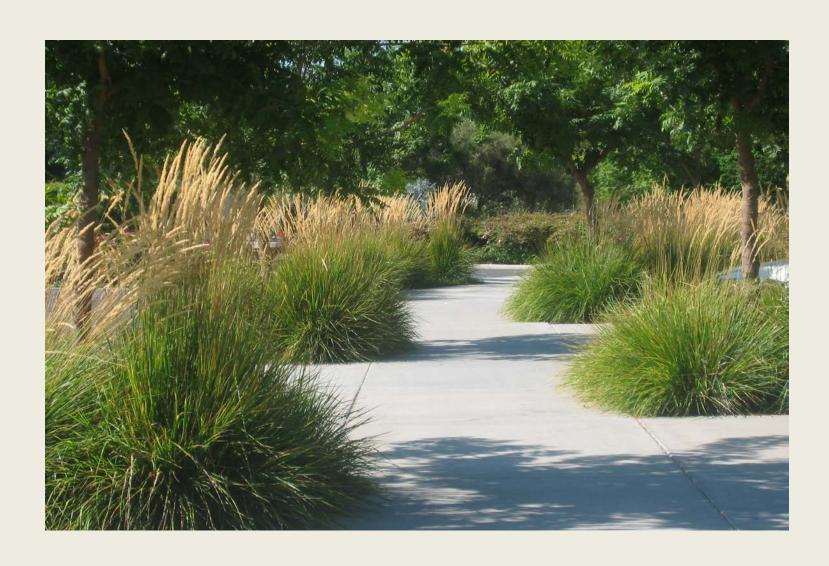


Non native compatible plants

Miscanthus sinensis 'Morning Light'



#### Calamagrostis 'Karl Foerster'



### Other compatible trees and shrubs *Acacia boormanii*







#### Arbutus 'Marina'



#### Don't forget you can use some old favorites that are summer dormant Narcissus and Amaryllis belladonna





## Hardy succulents Aloe, Echeveria 'Imbricata', Delosperma





## Adding Native plants to your Garden

- Give careful attention to establishment watering
- Make sure they will be with other plants with same water needs.
- Try and plant in fall.
- Supply supplementary irrigation the first summer.



## How to succeed with new plantings: check for plant quality before buying

- Examine woody plants for good structure
- Look at roots and avoid circling rooted plants
- Reject diseased or infested plants



## Never plant low and bury the crown of the plant or it may rot off

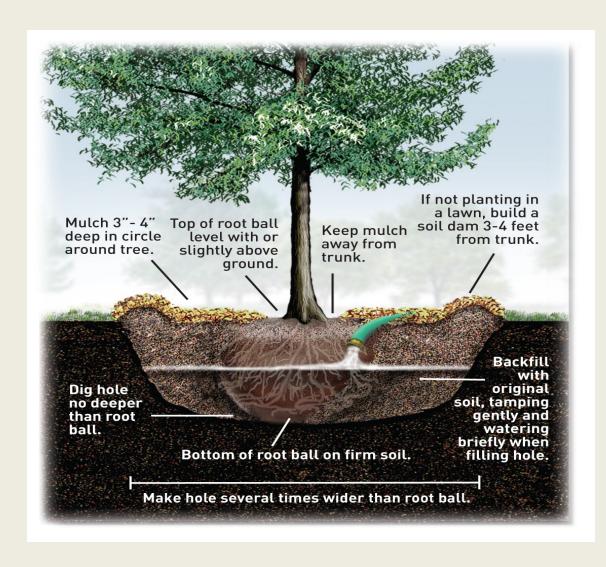


## When you plant take time to do it right



- Dig a hole as deep as the root ball is tall
- And twice as wide
- Backfill carefully removing air pockets
- No amending backfill
- Irrigate thoroughly

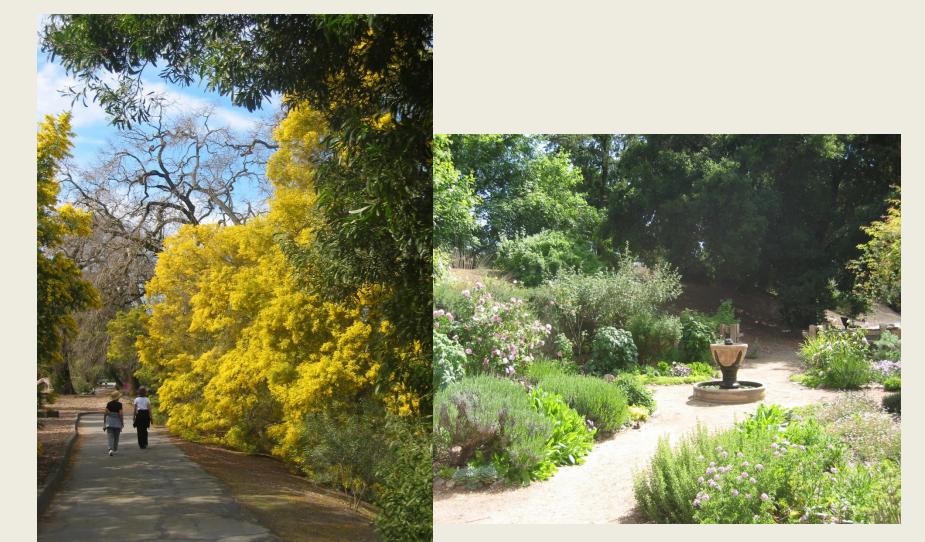
#### Check there is no mulch on trunk



# In summary successful native gardens require:

- All plants must have <u>compatible water</u> needs
- Provide <u>afternoon shade</u> to reduce plant stress
- If soils are heavy use grading to assure winter rain doesn't collect around plant
- Check if the plants have <u>summer dormancy</u>

# Choosing the right drought tolerant plants can help you create beauty with less water And create our own regional style



### To see more examples of low water and native landscapes visit the UC Davis Arboretum



