Sustainable Gardening

With California Native Plants

Part One

By Barbara Eisenstein

Native Plant Garden

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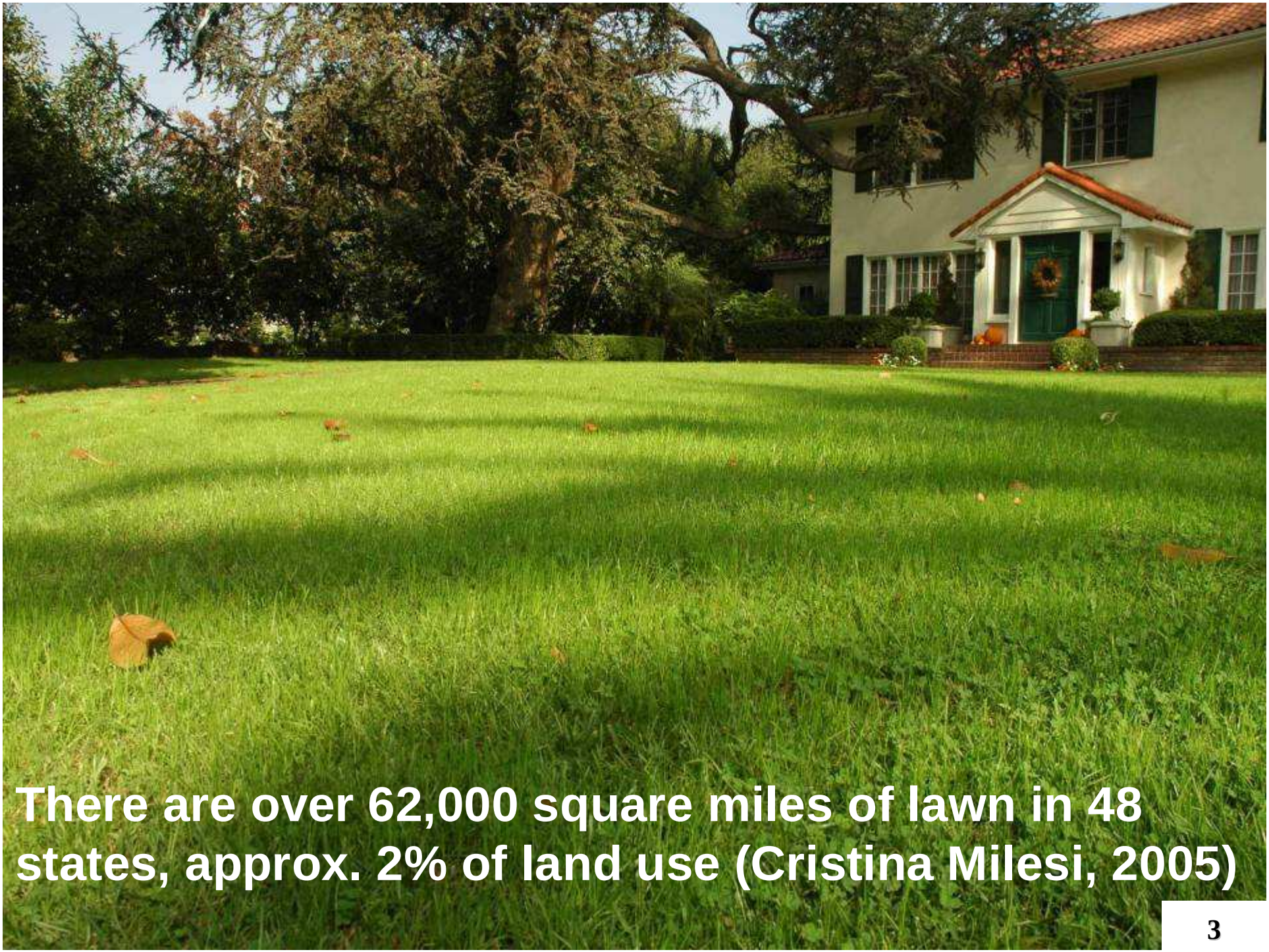

There are over 62,000 square miles of lawn in 48 states, approx. 2% of land use (Cristina Milesi, 2005)

Lawn Facts

- **30 to 60 percent of urban fresh water is used for watering lawns (depending on city).**
- **$5,250,000,000 is spent on fossil fuel-derived fertilizers for U.S. lawns.**
- **67,000,000 pounds of synthetic pesticides are used on U.S. lawns.**
- **60,000 to 70,000 severe accidents result from lawnmowers.**
- **580,000,000 gallons of gasoline are used for lawnmowers.**
- **$25,000,000,000 is spent for the lawn care industry.**
- **$700,000,000 is spent for pesticides for U.S. lawns.**
- **20,000,000 acres are planted in residential lawns.**
- ***Powered mowers contribute to noise pollution and hearing loss.***

From Redesigning the American Lawn by F. Herbert Bormann, Diana Balmori, Gordon T. Geballe, Yale University Press, 1993

US EPA - http://www.epa.gov/greenacres/wildones/handbk/wo8.html

Lawn Facts

It's impossible for these lawns to be net greenhouse gas sinks because too much fuel is used to maintain them **-Amy Townsend-Small, UC - Irvine**

(http://www.today.uci.edu/news/nr_turfgrass_100119.php Research to be published in Geophysical Research Letters.)

Big Picture

"We humans have co-opted such a large percentage of natural areas that, in far too much of the country, there are no undisturbed habitats left (Rosenzweig 2003)."

– Tallamy, Douglas. ***Bringing Nature Home, 2007, p. 28***

Concept that humans are separate from nature can no longer sustain us.

What is your vision of the future?
(200 years from now)

- **With improved understanding of interconnections in the complex system called Earth, we will live in a way that preserves biodiversity and the overall health of the planet.**
- **Our homes and yards will not be viewed as our personal property to do with as we please.**
- **The artificial division between “wild” and “landscaped” lands will be dropped.**

Sustainable Gardening

with California Native Plants

Part I: Getting Started

Part II: Plan, Prepare, and Plant

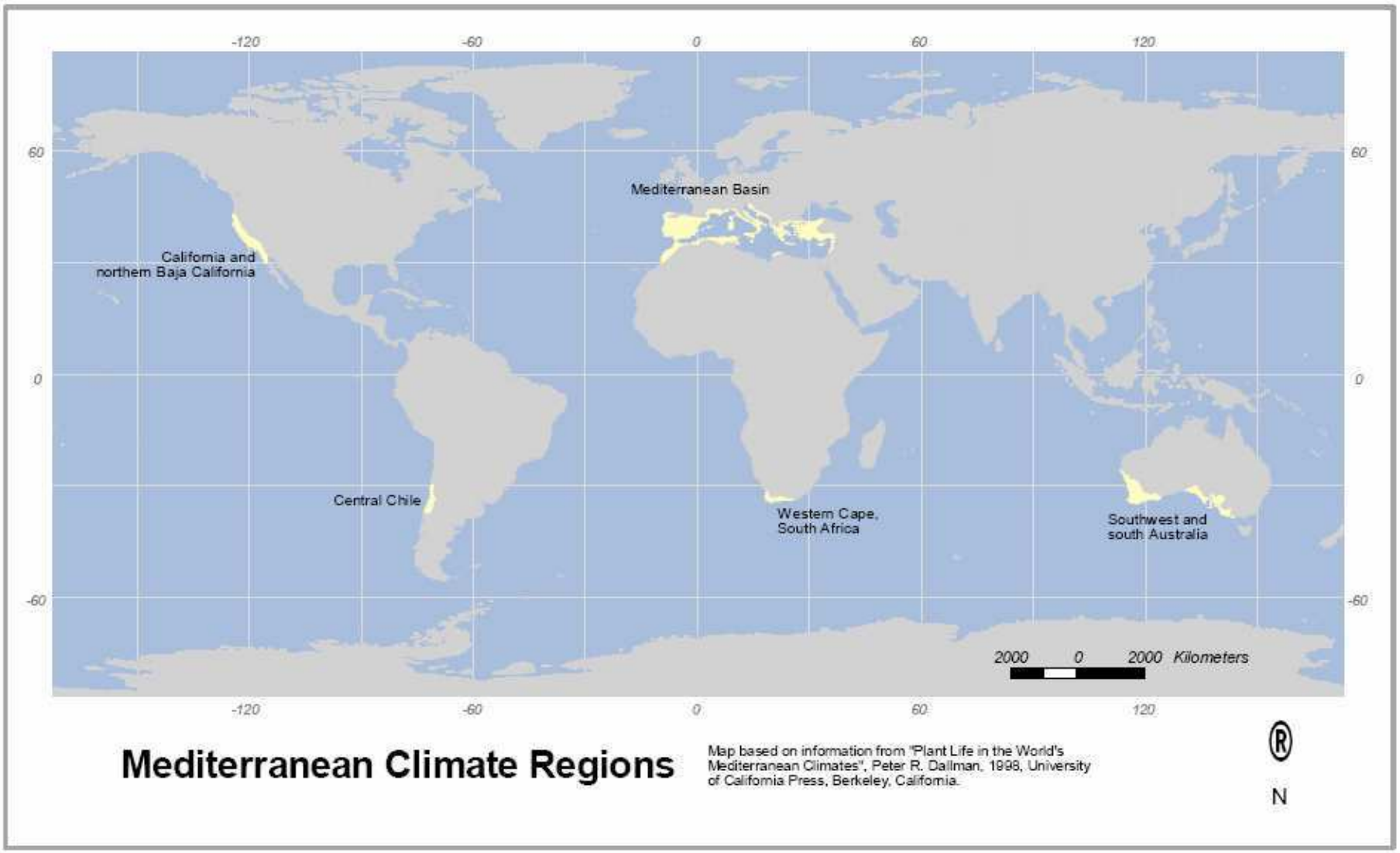
Part III: Care and Maintenance

Making the Change

- **What are our gardening conditions?**
- **How do I get started?**
- **With so many new plants to choose from, how do I know which ones will work best?**
- **How do I put the plants in my garden?**
- **What are some common mistakes?**
- **Gardens**

Mediterranean Climate

- **Hot, dry summers and cool, wet winters.**
- **Usually between 30-50 degrees n, and 30-40 degrees s of equator. Never on the east coasts of continents.**
- **Rainfall from westerly zone of frontal storms during the low-sun season; during the summer, the subtropical high pressure zone prevents rainfall.**



http://www.nature.nps.gov/im/units/nw29/medClim_map.pdf

California is not in the Mediterranean

Average annual rainfall in So. California is between 15 – 20” with no rainfall for 4 to 6 months.

Annual rainfall in the Mediterranean is generally higher than here, and significantly, rain often occurs in the spring and autumn so the annual dry season is not nearly as long as in So. Cal.

(Taken in Barcelona, September 8, 2005)

Cool, wet winters

Hot, dry summers

What native plants are doing when

Fall

- ***Weather:*** End of half year of dry, hot weather. Rains start, night time temperatures are cool, days are warm. Can have Santa Ana winds.
- ***Plants:*** Plant growth, seed germination begins with cooler temps, and rain.
- ***Blooming:*** Calif. fuchsias and some composites.

What native plants are doing when

Winter

- ***Weather:*** Cool, rainy season. Rains vary from as little as a couple of inches to over 30” when El Nino affects weather.
- ***Plants:*** Root and vegetative growth occurs, though inhibited by cooler temps.
- ***Blooming:*** Manzanitas and some currants/ gooseberries.

What native plants are doing when

Spring

- ***Weather:*** Rains taper off, temps warms up.
- ***Plants:*** Flowering, plant and some root growth. Beginning of seed production.
- ***Blooming:*** Ceanothus, wildflowers, redbuds…. Too many to name.

What native plants are doing when

Summer

- ***Weather:*** Hot and dry. Deserts have some monsoonal rains.
- ***Plants:*** Seed production. Little to no growth. Flowering desert plants with rain.
- ***Blooming:*** Desert plants, California goldenrod, composites, CA fuchsias, yarrow, CA buckwheat.

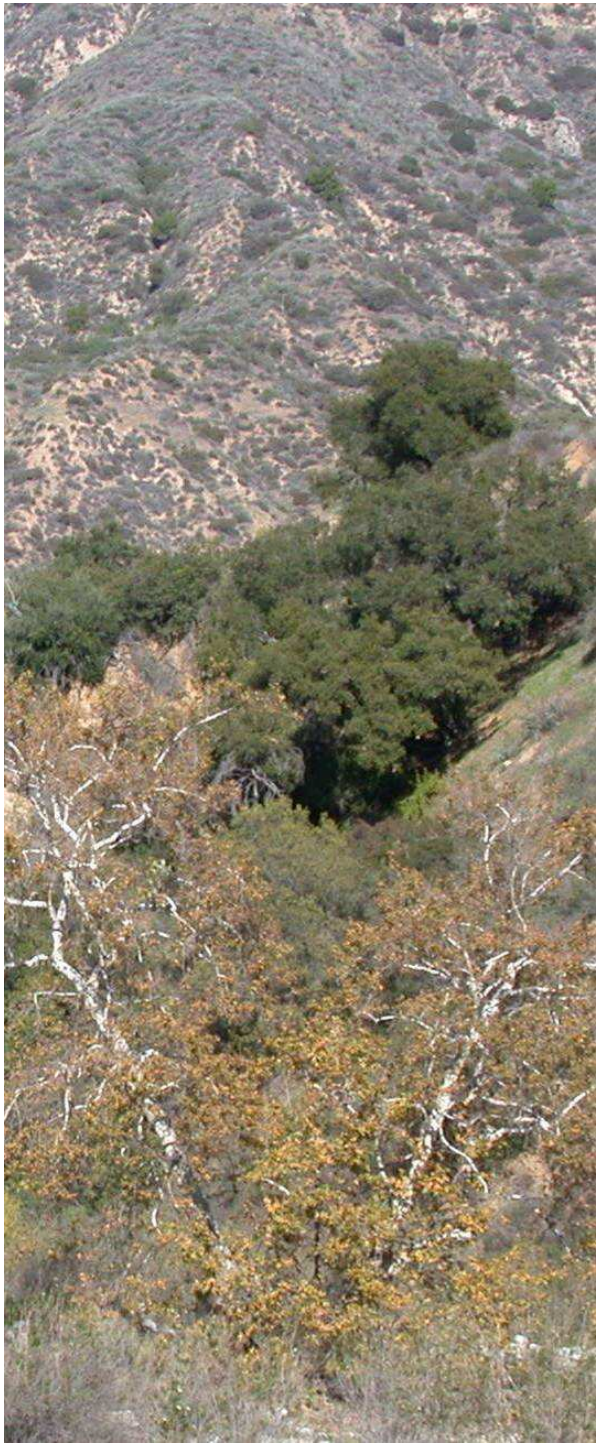
Making the Change

- What are our gardening conditions?
- How do I get started? (more on planning next time)
- With so many new plants to choose from, how do I know which ones will work best?
- How do I put the plants in my garden?
- What are some common mistakes?
- Gardens

Getting Started

Bold: tear it all out!

- **Pros:**
  - Will make big difference
  - Not constrained by existing plants
- **Cons:**
  - Can be big disaster if it fails
  - Expensive
  - Mistakes are costly
  - Neighbors get nervous



Getting Started

Moderate: section by section

- **Pros:**
  - Cost spread over time
  - Learn as you go along
  - Reduces costly errors
  - Can control irrigation to section for greater flexibility
- **Cons:**
  - Takes longer to complete full yard design
  - May be constrained by some existing landscaping
  - Yard may have a disjointed look

Getting Started

Cautious: plant by plant

- **Pros:**
  - Cost spread over time
  - Learn as you go along
  - Least disruption to yard
- **Cons:**
  - Constrained by existing landscaping
  - Takes long time to complete full yard design
  - Yard with “thirsty” tropical plants, can only add thirsty natives.

Making the Change

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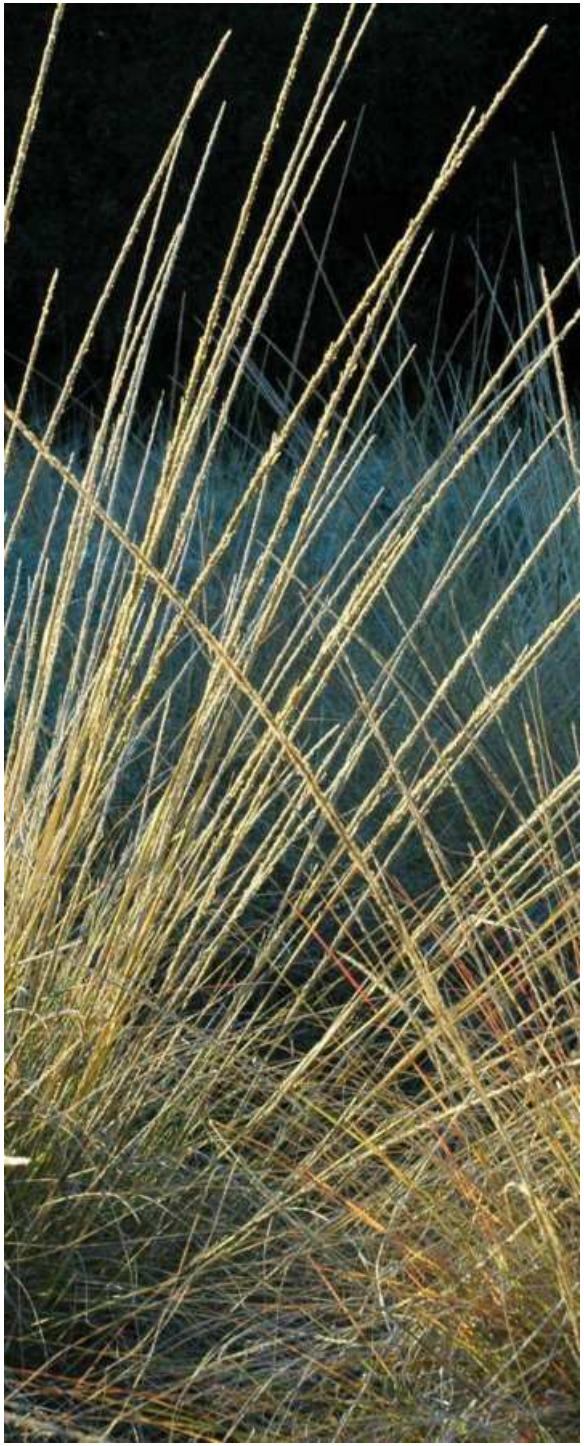
Which plants?

- **Pick plants that will like what you've got to offer.**
  - Pick plants that offer what you like.
  - Pick healthy plants.

Which plants?

- **Pick plants that will like what you've got to offer.**
  - Match the plant to the site
  - Read and believe the label – it will get that big!
  - For native plant selection, learn about where the plant or its parents come from (desert, slopes, marshes, N. Calif.)
  - **Choose plants that are locally native**



Which plants?

- **Pick plants that will like what you've got to offer.**
  - Climatic: mediterranean, coastal, inland, desert, high desert, elevation
  - Exposure: consider sunlight throughout the year
  - Water: natural rain fall, fog, runoff (swales), irrigation
  - Soil: drainage, nutrients, special conditions, eg. salinity.
  - Neighboring plants, structures, and infrastructure.

Which plants?

- **Pick plants that offer what you like.**
  - Right size for space (height, width).
  - Safety: thorns, size, root size.
  - Year around interest: flowers, fruit, interesting foliage.
  - Durable, long-lasting or,
  - Immediate show: fills in and flowers early but may not last long.

Which plants?

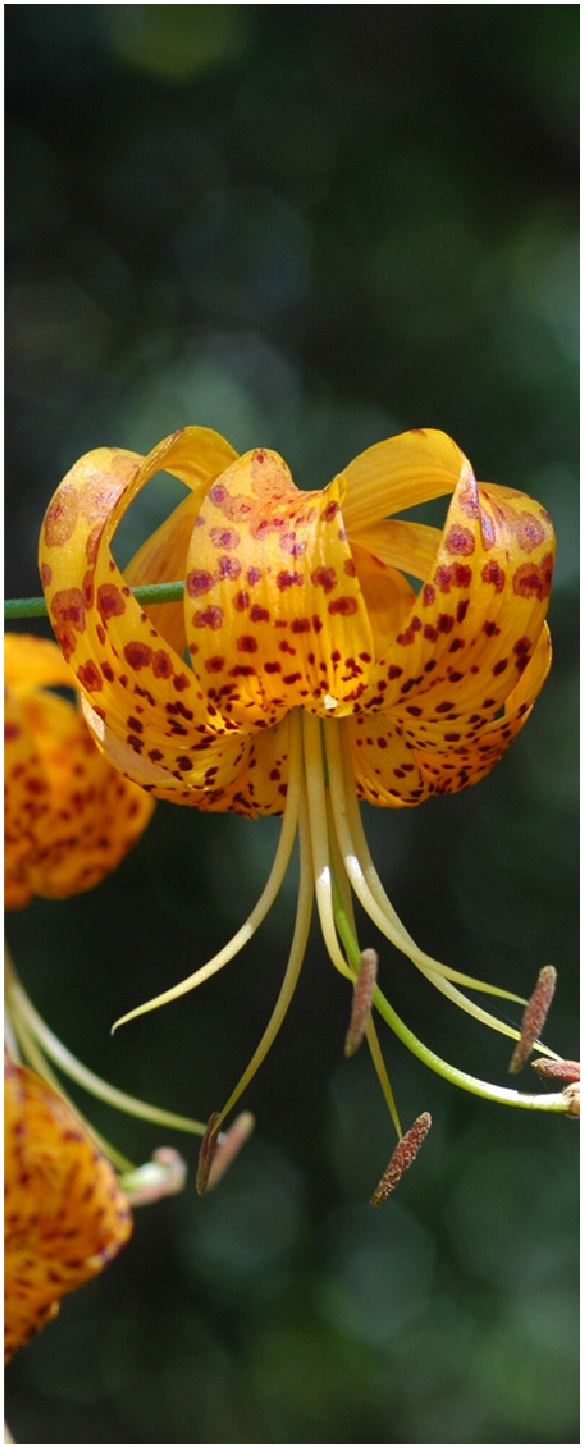
- **Pick healthy plants.**
  - Not too big or too small for pot.
  - No sign of disease. Look for pests, mildew, smell bottom of pot.
  - Root crown is right about at soil level.
  - Roots are not coming out of the bottom of the pot.

Which plants?

- **Pick healthy plants.**
  - Good structure, especially trees. Avoid trees that have lower branches removed (lollipop shape).
  - For trees, not too tightly staked. Check for good caliper.

Which plants?

- **Pick healthy plants.**
  - In most cases, smaller (younger) is better.
    - ✓ Less transplant shock.
    - ✓ Less time in the nursery to be damaged, to develop poor root structure or form.
    - ✓ Less expensive.
    - ✓ But sometimes larger size is indicated to prevent loss from trampling.



Which plants?

See the plants in action:

- Open space (especially local)
- Gardens of neighbors and friends
- Gardens: RSABG, TPF, SBBG
- Spring native plant garden tours (Theodore Payne Foundation Native Plant Tour, 4/9-10/2011)

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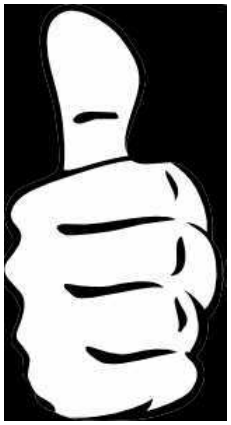
Planting



When

Rule of Thumb:

October - February, maybe March.

- **Trees and shrubs**

  mid-October - February

- **Subshrubs, perennials and vines**

  mid-October – April

Planting

When

- Do not plant when high temperatures are in the forecast (triple digits)
- Soil should be cool and not hot and moist (native plants are prone to root diseases)
- Do not plant when soil is saturated
- Riparian plants can be planted anytime of the year (kind of)

http://www.weedingwildsuburbia.com/

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Adventures with Native Plants

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2010 IN THE GARDEN

February: Claremont pink currant

Ribes sanguineum var. *glutinosum* 'Claremont'

TO DO IN THE GARDEN:

- Shop for native plants **(Rancho Santa Ana Botanic Garden, Grow Native Nursery)**

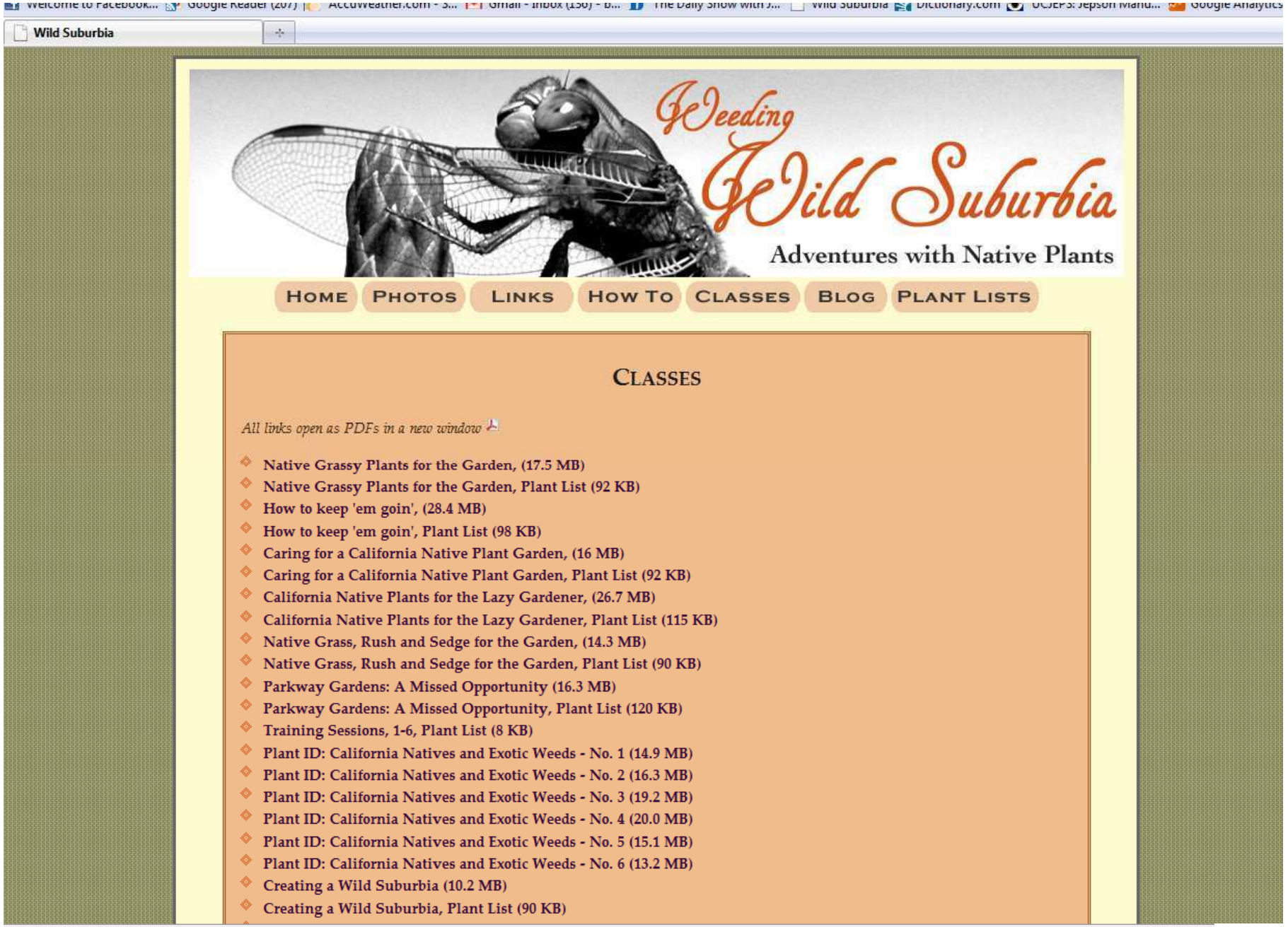
WILD SUBURBIA BLOG

ARCADIA REVISITED

2/1/2011

On Monday, January 31st I attended the LA County Department of Public Works (DPW) Sediment Management Strategic Plan, Task Force Meeting. Quite a mouthful! Held at 2 PM on a Monday, they clearly were not concerned about the fact that many people have day jobs. Still I went with the…

BARBARA EISENSTEIN is a California native plant gardener and horticulturist. She lives in South Pasadena and gardens with her dog, Milo, though he usually just lies in the dirt and gets sunburned. Until recently she ran the Native Plant Garden Hotline at **Rancho Santa Ana Botanic**


Wild Suburbia
Weeding Wild Suburbia
Adventures with Native Plants
HOME
PHOTOS
LINKS
HOW TO
CLASSES
BLOG
PLANT LISTS
CLASSES
All links open as PDFs in a new window
Native Grassy Plants for the Garden, (17.5 MB)
Native Grassy Plants for the Garden, Plant List (92 KB)
How to keep 'em goin', (28.4 MB)
How to keep 'em goin', Plant List (98 KB)
Caring for a California Native Plant Garden, (16 MB)
Caring for a California Native Plant Garden, Plant List (92 KB)
California Native Plants for the Lazy Gardener, (26.7 MB)
California Native Plants for the Lazy Gardener, Plant List (115 KB)
Native Grass, Rush and Sedge for the Garden, (14.3 MB)
Native Grass, Rush and Sedge for the Garden, Plant List (90 KB)
Parkway Gardens: A Missed Opportunity (16.3 MB)
Parkway Gardens: A Missed Opportunity, Plant List (120 KB)
Training Sessions, 1-6, Plant List (8 KB)
Plant ID: California Natives and Exotic Weeds - No. 1 (14.9 MB)
Plant ID: California Natives and Exotic Weeds - No. 2 (16.3 MB)
Plant ID: California Natives and Exotic Weeds - No. 3 (19.2 MB)
Plant ID: California Natives and Exotic Weeds - No. 4 (20.0 MB)
Plant ID: California Natives and Exotic Weeds - No. 5 (15.1 MB)
Plant ID: California Natives and Exotic Weeds - No. 6 (13.2 MB)
Creating a Wild Suburbia (10.2 MB)
Creating a Wild Suburbia, Plant List (90 KB)

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