Landscape Analysis and Design

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Upcoming CNPS talks

- **Meeting Date**     **Title / Speaker**
- Nov. 26 2013        Landscape Analysis / Debra Ayres
- Jan 28 2014         Fungi of the Sierra Nevada / Daniel Nicholson
- Mar 25 2014         Landscaping with Native Plants / Karin Kaufman
- May 27 2014         Wildflowers and Wandering in El Do County / Sue Britting
- July 28, 2014       Butterflies and Their Plant interactions / Greg Kareofelias
- Sept 23 2014        California Native Plants for your garden / Nancy Gilbert
ON the first of November, when Mexicans celebrate a holiday called the Day of the Dead, some also celebrate the millions of monarch butterflies that, without fail, fly to the mountainous fir forests of central Mexico on that day. They are believed to be souls of the dead, returned.

This year, for the first time in memory, the monarch butterflies didn’t come, at least not on the Day of the Dead. They began to struggle in a week later than usual, in record-low numbers. Last year’s low of 60 million now seems great compared with the fewer than three million that have shown up so far this year. Some experts fear that the spectacular migration could be near collapse.

“It does not look good,” said Lincoln P. Brower, a monarch researcher who has been tracking the butterflies for decades.
Importance of natural habitat

Garden For Wildlife
MAKING WILDLIFE HABITAT AT HOME

Create a Certified Wildlife Habitat

Whether you have an apartment balcony or a 20-acre farm, you can create a garden that attracts beautiful wildlife and helps restore habitat in commercial and residential areas. By providing food, water, cover and a place for wildlife to raise their young you not only help wildlife, but you also qualify to become an official Certified Wildlife Habitat®.

How to Create a Wildlife-Friendly Garden

Provide Food for Wildlife

Everyone needs to eat! Planting native forbs, shrubs and trees is the easiest way to provide the foliage, nectar, pollen,
Landscape Analysis Questionnaire

- Debra Ayres
- drayres@ucdavis.edu
- “Questionnaire” in Subject Line
Developing a Plan
Developing a Plan

- **Base Map development**
- House located on site
- Rooms, doors, windows located in house
- Will locate utility lines, existing trees you want to keep, etc.
- Drawn on velum (tracing paper)
- Photocopies or blueprints allow rough drafts
Developing a Plan

- Results of analysis (questionnaire) identified in a copy of the base map
Developing a Plan

- “Bubble Diagram”
- Solutions to analysis roughed in with bubbles on a base map copy
Developing a Plan
Developing a Plan

- Master Plan
- Incorporates solutions to problems and features desired in the landscape
- Copies are made for:
  - Plant plan
  - Irrigation system design
Front yard makeover in a 1950s garden
Bird’s eye view sketch
Landscape Analysis

- Sick Sycamore
- Boring front walk
- Need buffer at street corner
- Narrow, unusable porch
- LAWN everywhere
Landscape Solutions

Remove sycamore – cover underground roots and trunk with new walkway and mound

New welcoming walk section steps between mounds

Mound created at corner from rolled up lawn and topsoil

Porch expanded with new deck; railing removed; azaleas and Japanese maples replanted

Lawn removed and replaced with mostly native plants and decorative aggregates
Landscape Solutions

Remove sycamore – cover underground roots and trunk with new walkway and mound
Landscape Solutions

New welcoming walk section steps between mounds
Landscape Solutions

Mound created at corner from rolled up lawn and topsoil
Corner Mound
Corner Mound
Landscape Solutions

Porch expanded with new deck; railing removed; azaleas and Japanese maples replanted
Landscape Solutions

Lawn removed and replaced with mostly native plants and decorative aggregates (bark, river cobbles, crushed rock)
Lawn removed and replaced with natives
Lawn removed and replaced with natives
Landscape Evolution

2009        2011        2012        2013
Landscape Analysis – a foothill example

- Entry too linear
- Turkeys kick bark over walk; deer break shrub branches going to and from beds
- Unnecessary lawn
- Fountain surrounded by circle of serpentine crushed rock
Landscape Solutions – a foothill example

Turkeys kick bark over walk; deer break shrub branches going to and from beds
Replace bark with river cobbles
Landscape Solutions – a foothill example

Entry too linear
Unify both sides of walk with similar plants and river cobbles = 1 garden
Use wrought iron bed as a divider to break up linearity

Unnecessary lawn
Lawn removed to create unified garden
Landscape Analysis – a foothill example

- Fountain surrounded by circle of serpentine crushed rock
- Cover serpentine rock with decomposed granite to better blend with native rock
- Break up circular space with arcs of river cobbles
Garden well received by the wildlife
Gardens in the Foothills – This ain’t the flatland!
Landscaping in the foothills

- Unique concerns:
  - Native Species,
  - Fire,
  - Deer,
  - Fire + Deer,
  - Slopes
Landscaping in the foothills - Fire

- Create defensible space of 100’ around your home
- Remove all flammable vegetation within 30’ immediately surrounding your home
- Create a reduced fuel zone in the remaining 70’
  - Space between plants
  - Remove plants beneath trees
Landscaping in the foothills - Fire

- Remove lower tree branches at least 6’ from ground
- Use fire-resistant plants
- Water regularly (see deer)
- Remove dead branches, needles and leaves
- Use care with anything that may give off a spark
Landscaping in the foothills - Fire

http://ucanr.edu/sites/gardenweb/General/Landscaping_for_Fire_Protection/
Landscaping in the foothills - Fire


Home Landscaping for Fire

GLENN NADER, UCCE Livestock and Natural Resources Advisor, Sutter-Yuba-Butte Counties;
GARY NAKAMURA, Area Forestry Specialist; Codirector of Center for Forestry, UC Berkeley;
MIKE DE LASAUX, UCCE County Director and Natural Resources Advisor, Plumas-Sierra Counties; STEVE QUARLES, UCCE Wood Durability Advisor, Contra Costa County; and YANA VALACHOVIC, UCCE Forest Advisor, Humboldt–Del Norte Counties

More than 1,400 structures are destroyed by wildfire each year just within the jurisdiction of California’s Department of Forestry and Fire Protection (CAL FIRE). However, many homes are also saved as a result of the owners’ careful pruning and landscaping techniques that minimize ignition of vegetation and spread of fire to their home (CAL FIRE 2005).

Incorporating fire safe concepts into the residential landscape is one of the most important ways you can help your home survive a wildfire. When conditions are dry and windy, the grasses, brush, trees, or other vegetation surrounding your home become a dangerous fuel source. Creating an area of defensible space (or area of reduced fuel) between your home and flammable vegetation reduces the risk of home
Landscaping in the foothills - Fire

http://www.readyforwildfire.org/
Landscaping in the foothills - Deer

- Evaluate deer population
  - 1 – never see a deer
  - 10 – herds of deer regularly move through your yard
Deer not only eat the plants, they trample them, and girdle trees when “jousting” or rubbing velvet off antlers

Choose plants that are resistant

Drought tolerant – little water during growing season concentrates chemicals that the deer don’t like (but see Fire)

Don’t plant in the fall

Use cages during early years
Landscaping in the foothills - Deer

http://njaes.rutgers.edu/deerresistance/
## Landscaping in the foothills – Deer and Fire

- [http://www.laspilitas.com/easy/deerfire.htm](http://www.laspilitas.com/easy/deerfire.htm)

A list of California native plants tolerant of deer and fire can be found at the above link. Below is a table of some of these plants:

<table>
<thead>
<tr>
<th>Genus/Species</th>
<th>Common Name</th>
<th>Deer Proof by 10 usually safe to 1 totally destroyed</th>
<th>Fire (burn times, in seconds/plant height, in meters, max &gt;0), nothing is safe but some are better than low and/or burns poorly, better (0, medium height, medium burn), or you should think about it (1, high and fast)</th>
<th>Deer Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies grandis</td>
<td>Santa Lucia Fir</td>
<td>8</td>
<td>2, usually safe if no fire ladder present</td>
<td>usually safe</td>
</tr>
<tr>
<td>Acacia Greggi</td>
<td>Catclaw</td>
<td>10</td>
<td>20, creates a lot of debris</td>
<td>very thorny but even gallon stock not bothered</td>
</tr>
<tr>
<td>Acer circinatum</td>
<td>Vine Maple</td>
<td>7</td>
<td>5</td>
<td>Japanese Maple should be similar</td>
</tr>
<tr>
<td>Acer macrophyllum</td>
<td>Big Leaf Maple</td>
<td>8</td>
<td>6, flashy</td>
<td>protect when young</td>
</tr>
<tr>
<td>Acer negundo</td>
<td>California Box Elder</td>
<td>9</td>
<td>female 1.5, male more like 5</td>
<td>bothers only seedlings on really bad years</td>
</tr>
</tbody>
</table>
Slopes and Erosion
Slopes and Erosion

- Water flows downhill unless checked
- Direct water flow with swales
- Remove water with French drains
- Cover exposed soil with straw, matting, groundcover
Hillsides