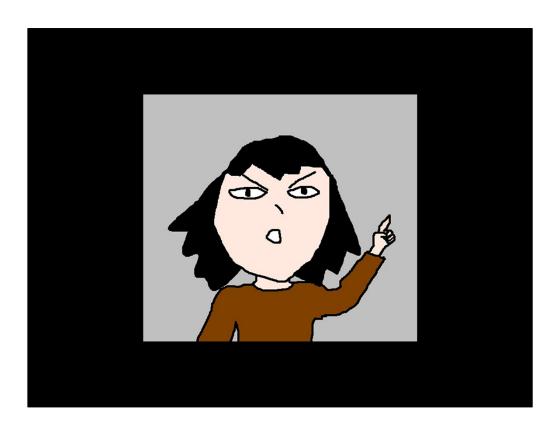


Successful Landscaping: Teaching Californians to UNLEARN

Hei-ock Kim, CNPS Special Projects Coordinator

Today I want to talk about the education needed to develop a successful native landscaping culture in California, and how a lot of it amounts to unlearning what we think we know.

Normally I like to emphasize the power of positive messaging. Phrases like "Must-see!" and "Choose wisely" can be more affirming to your audience than



"Don't miss out!" or "Don't forget."

And yet, there is a place in our world of happy thoughts for "Don't":



Isn't it nice once in awhile to hear "Don't get up" or



"Don't worry"?

So when I talk to people about the benefits of California native landscaping, I often find that they get very excited about my "Don'ts". "Instead," I tell them with a deep breath,



Relax... (scroll 2 more slides)







Even in the summer, natives bring color (2 more slides)





and life to California gardens – these are all inland gardens photographed in the brutal heat of August 2013.

You may ask why there are so many don'ts in native landscaping. The answer is surprisingly simple: because our gardening predecessors taught us to love things that "don't" come from California, and when you try to make things go where they "don't" fit,



you get high-maintenance, high-need situations. So what are some of the key Don'ts and how do they benefit us?



Don't overwater. Natives generally need only what they get from Mother Nature. In a garden situation, they might need a little bit more to stay fresh. Too much, however, and you just get a lot of weeds and potentially dead natives.

This is good for everyone of course. Native gardens typically save 40%-80% of our potable water. And homeowners not only get to save money but weed less too!



Don't fertilize or amend – natives WANT lean soil, that's what they've evolved to thrive in.

Besides reducing work and expense, the advantage here is that native gardens contribute to a reduction in synthetic or excess nutrients in our urban runoff.



Don't overplant – then you won't have to prune constantly. Natives may look sparse when they're little, but resisting the temptation to overfill will be rewarding in the end. Left alone, the plants will grow to the size they're meant to, so you just need to choose plants for their mature size.

Now think a moment about the ramifications. They go beyond saving labor for the homeowner. Less green waste also means less pressure on municipalities to collect, store, and move green waste.

Native landscaping = IPM (Integrated Pest Management)

biological control natural weed suppression maximum water retention natural pest/disease resistance



I also like to mention that native plants naturally have pest resisting qualities, so Don't use pesticides. In fact, native landscaping IS Integrated Pest Management. Professionals regularly tell me that, with a 60-70% healthy canopy, native landscapes demonstrate inherent weed inhibition. So they actually don't even budget for weed control after establishment, and that can save them up to 60% of their costs.



Reduced pesticide use also means less risk of drift from indiscriminate application, less threat to beneficial, non-target animals especially pollinators, and to non-target plants. Which is pretty important considering



gardeners use 20 times more pesticides than farmers! And Surfrider reports that a significant amount of it ends up in our oceans and rivers through urban runoff.

The upshot of all this is that we really don't need to be working so hard. On their own, native gardens:



Attract pollinators and other beneficial animals. USDA, by the way, says that native pollinators are the most effective, they prefer native plants, and that all landscapes should contain natives.



Promote healthy soils and enhance edible gardens



And in fact play a role in environmental justice: all that reduced cost and effort means that almost anyone of any economic means can access the beautiful outdoor living that California is known for.

I love to show this slide because it shows just how true that is. This garden was planted and is maintained by someone who is in a wheelchair, suffered from a stroke years ago and still has diminished capacity.



The City of Santa Monica put some hard research and numbers to the topic. They conducted a 9-year study of side-by-side gardens:



one native and one conventional with a lawn. The results were conclusively in favor of native landscapes:

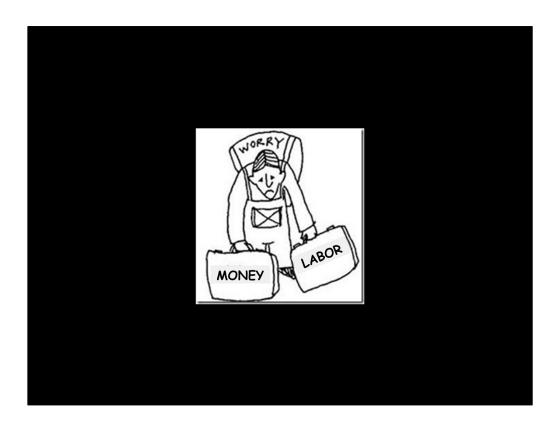
Native Garden

"cost-effective, environmentally beneficial, easy to replicate"

- 83% less water
- 68% less maintenance
- 56% less green waste

Just look at these numbers - 83% less water! Furthermore, it is cost-effective, environmentally beneficial, and easy to replicate.

(if someone asks - 56% less green waste: during tough winter, didn't give supplementary water (which need to do if not getting typical rains by Jan, water when they're growing, not when they're dormant); during early summer gave extra water and killed natives generating green waste)



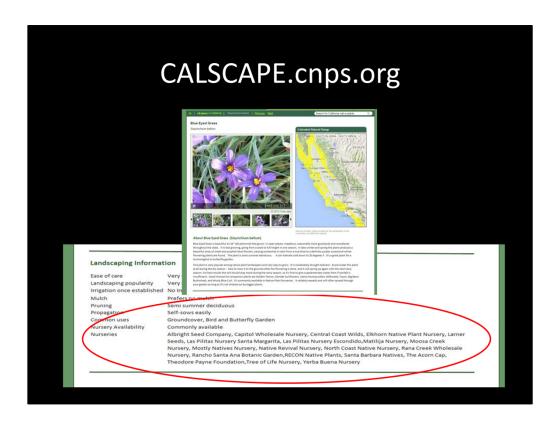
So why isn't native landscaping mainstream? Why are people still out there making things hard for themselves?



We have 34 chapters all over CA and Baja that hold hundreds of educational events like workshops, free lectures, plant sales ... the list goes on.



We also have an online plant finder called Calscape that helps people search for ideal plants, local to their area, simply by plugging in their address.



Each plant has an extensive profile with gorgeous photos, which covers everything from mature height and width to maintenance guidelines to how readily available it is and which nurseries carry it.

But water agencies can't rebate every homeowner in the state, city planners can only dictate so far what people can and cannot do, and agencies have already been working for years to inspire behavior changes in their customers. What more can be done?

Our goal:

To see a rise in professionals who recommend native landscapes to their clients, and who produce beautiful and successful native landscapes

At CNPS, we realized the answer lies in the professionals. The outmoded landscaping practices we inherited are still so prevalent that the average professional knows as little about native landscaping as the average homeowner does, and possibly less.

And yet the impact they have on our landscaping culture is far greater. They work on large-scale, high-profile native landscapes in addition to thousands of private properties, and their successes and failures influence public opinion. In order to get the fastest results, their education needs to be addressed in a more focused manner.



The education needs to be formalized, offered statewide, and standardized regionally, so we began creating a certification program for people who install and maintain native landscapes.



before I go into it, I want to take a moment to describe who CNPS is and why we are uniquely qualified to offer this education.



CNPS is a statewide, 10,000-member nonprofit that works to protect and promote California's native plants and their natural habitats. We have been the state's premier native plant resource for 50 years. As you can see by our website, we are a science-based organization, heavily involved in conservation and research efforts, as well as also outreach and education in native plant gardening.



Many details of the Certification Program I'm about to describe, by the way, can be found in the Gardening section under the placeholder title, CNPS Landscaper Certification.

So, as a professional, your credibility would be supported by the oldest native plant resource in California.

As a client, there is no substitute for knowing that the company or individual you hire to manage your landscape is truly as knowledgeable AND environmentally responsible as they claim to be.

Who should get the CNLS?

- Landscape contractors and companies
- Public agency/water districts educational staff
- Independent maintenance gardeners
- Staff maintenance gardeners
- Landscape architects and designers



Who is our audience? We invite:

large and small Landscape companies, owners and workers
Public and water educational staff such as water conservation specialists
Maintenance gardeners, and in particular Spanish-speakers who miss out on
valuable information because of the language barrier
School districts and nursery maintenance staff
Designers whose plans can become better informed for healthier landscapes

Certification curriculum

- a. Overview
- 1) Leveraging your certification
- 2) Introduction
- 3) Soils
- 4) Watering principles
- 5) Site Prep
- 6) Installation
- 7) Early establishment/Maintenance
- 8) Troubleshooting & Case histories



The curriculum, as you can see, is comprehensive, so I'll just paint the picture in broad strokes.

Section 1: How to Leverage Your Certification

- Increased marketability & eligibility for jobs
- Reduced health risks
- Increased effectiveness in educating clients
- Reduced labor & operating costs
- Improved best practices and IPM
- Access to CNPS marketing resources



We feel it's important to teach students how to take full advantage of their certification and become better resources for their clients. Once they're certified, we'll also add them into an online searchable database in Calscape.

We also hope that eventually we'll be able to convince agencies to request only certified professionals in their contract language.

Don't settle

- Be proactive rather than reactive
- Ask "the next questions"
- Educate your clients with confidence about environmentally responsible gardening principles
- Take ownership of your work

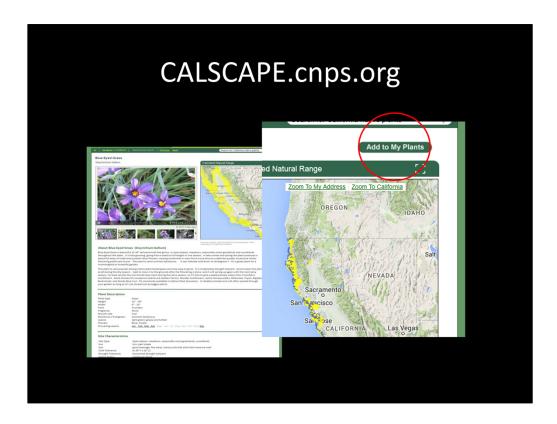
Here's another key Don't: Don't Settle for the old ways. This reminds professionals that they can do better, that they can redefine themselves and their work by choosing to stop problems before they start

Section 2: Introduction • Environmentally responsible landscaping • Basic ecology & taxonomy • California's unique climate • Invasive species • Most commonly used native species

A major element of the Introduction is plant identification. Students will be required to know the most commonly used landscape natives.



Here's a sample page from the workbook we'll give them (also in your handout) showing the identifying characteristics for penstemon.



This list will be supported by yet another feature of Calscape, where each class will have its own folder of plants saved under Add to My Plants.

Plant Description	
Plant type	Grass
Height	12" - 24"
Vidth	6" - 12"
orm	Fountain
ragrance	None
Growth rate	Fast
Deciduous / Evergreen	Summer deciduous
eaves	dark green; grassy and tufted
lowers	Blue, Purple
Flowering season	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Site Characteristics	
Site Type	Open places, meadows, seasonally moist grasslands, woodlands
Sun	Sun, part shade
Soil	good drainage; flat areas, loamy soils that that hold moisture well
Cold Tolerance	to 20° F (-12° C)
Drought Tolerance	Somewhat drought tolerant
Native Status	California native
Plant community	Foothill Woodland, Sagebrush Scrub, Yellow Pine Forest, Wetland-riparian
Companion Plants	Golden Yarrow, Slender Sunflower, Honeysuckles, Milkweek, Toyon, Big Basin Buckwheat, Wooly Blue Curl,
	Salifornia Aster
Landscaping Inform	ation
Ease of care	Very easy to grow
Landscaping popularity	Very Popular
	d No Irrigation during dry season
Mulch	Prefers no mulch
	Freiers no maior
	Sami summer deciduous
Pruning	Seni summer deciduous
Pruning Propagation	Self-sows easily
Pruning Propagation Common uses	Self-sows easily Groundcover, Bird and Butterfly Garden
Pruning Propagation Common uses Nursery Availability	Self-sows easily Groundcover, Bird and Butterfly Garden Commonly available
Pruning Propagation Common uses Nursery Availability	Self-sows easily Groundcover, Bird and Butterfly Garden Commonly available Albright Seed Company, Capitol Wholesale Nursery, Central Coast Wilds, Elkhorn Native Plant Nursery, Larner
Pruning Propagation Common uses Nursery Availability	Self-sows easily Groundcover, Bird and Butterfly Garden Commonly available Albright Seed Company, Capitol Wholesale Nursery, Central Coast Wilds, Elkhorn Native Plant Nursery, Larner Seeds, Las Pilitas Nursery Santa Margarita, Las Pilitas Nursery Escondido, Matilija Nursery, Moosa Creek
Pruning Propagation Common uses Nursery Availability Nurseries	Self-sows easily Groundcover, Bird and Butterfly Garden Commonly available Albright Seed Company, Capitol Wholesale Nursery, Central Coast Wilds, Elkhorn Native Plant Nursery, Larner

This means professionals can remind themselves of important information – notice the maintenance information – *on their phones in the field.*

Section 3: Soils

- Soil testing field methods
- Healthy soils
- Soils and plant selection
- Soil problems & solutions

Section 4: Watering Principles

- Cool, wet winters and hot, dry summers
- Water use by landscape plants
- Managing irrigation





The next 2 sections, Soils and Watering Principles, form the crux of the whole curriculum. Without soil and water, you have no plants.

By the way, we call it Watering and not Irrigation because we want to stress the implementation of a CONSCIOUS PLAN, not just leaving the timer at its factory setting of 10 minutes 3 times a week and walking away. Ironically, as water is the essential ingredient for life, landscape watering is the source of manyof our current environmental woes.

Section 5: Site preparation

- Hardscape & construction
- Water availability
- Receiving and storing plants
- Adapting an existing landscape

Section 6: Installation

- Prepare planting hole
- Planting
- Hands-on learning





Site prep and Installation are the stages at which most plants are set up either to succeed or die, so there will be a lot of hands-on practice here.

Section 7: Early Establishment Troubleshooting & & Maintenance

- Section 8: **Case Histories**
- Seasonal issues
- Environmental issues
- Horticultural practices (including mulching, pruning, feeding, weeding)





Our curriculum building team

Chris Soltis

Owner – Soltis Landscapes

Ellen Mackey

Senior ecologist & co-author of Care and Maintenance manual

• Frank Simpson

Landscape consultant & Instructor – UCLA Extension, Landscape Architecture

Ken Lee

Horticulture and Landscape Design faculty – Saddleback College



Want to give a shoutout to our amazing curriculum building team of 8 experts, who are volunteers by the way, and who represent Contractors, Designers, Nurserymen, and University faculty

Our curriculum building team

Mike Evans

Owner – Tree of Life Nursery

Nick Basinski

Pesticide specialist, CNPS member

Orchid Black

Garden designer & Sustainable Garden Practice instructor for Horticulture and Gardening program — UCLA extension

Vic Claassen

Research Soil Scientist – UC Davis Dept. of Land, Air, and Water Resources



With backgrounds in ecology, Biology, Pesticides, Marketing, design, etc.

Additional advisers

- Clayton Tschudy

 Horticulture Director, Water Conservaton Garden
- Dan Gluesenkamp Executive Director, CNPS
- Frederique Lavoipierre Education Director, Santa Barbara Botanic Garden
- Pam Pavela Western Municipal Water District
- **Tish Berge**Admin & Finance Director, Rincon Municipal Water District



And our additional advisers from water agencies and public gardens

California's coalition is growing...





- Arlene Hopkins: Los Angeles Unified School District
- Brett Hall: UC Santa Cruz
- Brian Leahy: Dept. Pesticide Regulation
- Caltrans
- CA Landscape Contractors Association
- California Natural Resources Agency
- California's Own Landscape
- Carol Bornstein: Natural History Museum of LA County

- Celeste Cantù: Santa Ana Watershed Project Authority
- Cheryl Wilen: UCIPM
- Dept. of Water Resources
- Don Schulz: Cuyamaca College
- Frances Spivy-Weber: State Water Resources Control Board
- Greg Weber: California Urban Water Conservation Council
- Gregory Plum, Sonoma County Water Authority
- Juan Garcia: Irvine Ranch Water District
- Kassim Al-Khatib: UCIPM
- Metropolitan Water District

As you can see, this project is bigger than CNPS – all of California needs it, so all of California needs to work together. What's great is that people understand very quickly how important this is.

in fact, we already have numerous other partners among public agencies, water districts, professional associations, Universities, Nonprofits, Landscape companies – and more are signing on every day.

... and growing...

- Mission Resource Conservation District
- Rancho Santa Ana Botanic Garden
- Resource Conservation District, San Diego
- Rincon del Diablo Municipal Water District
- Riverside-Corona Resource Conservation District
- Russell Ackerman: City of Santa Monica
- •San Dieguito Water District
- Santa Barbara Botanic Garden
- Soltis and Company, Inc.

- Stephanie Landregan: UCLA Extension Landscape Architecture Program
- •Theodore Payne Foundation
- Think Blue San Diego
- Tree of Life Nursery
- Vallecitos Water District
- Water Conservation Garden
- Western Metropolitan Water District

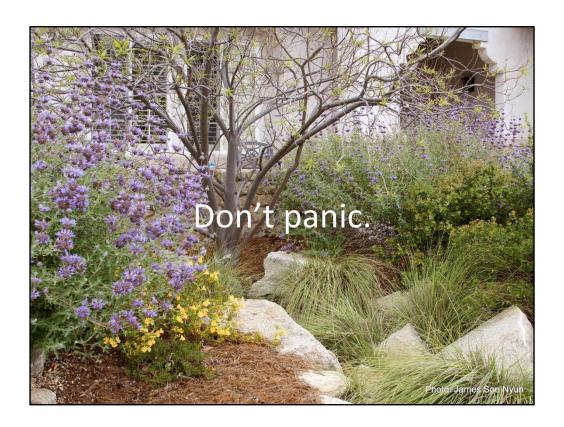




Everyone is contributing in various ways, from providing funds to marketing to facilities to technical reviewers.

I get to thank a few partners personally today for their support – MWD first of all, Western MWD, Irvine Ranch, Moulton Niguel, DWR, Greg Weber of CUWCC.

Are there other partners here today?



My last Don't to people when I talk about natives is: Don't Panic. One of the most ideal drought solutions is already here – we just need to implement.



Finally I wanted to show you a mockup of our new website coming soon, which demonstrates our structure of offerings.

For agencies, we know your customers are coming to you for answers and we want to help you provide them with information.

We also want to keep you posted on things like CNPS' contributions to DWR's MWELO, and invite you to have a presence at our events to disseminate information directly to your customers.

In sum, I'd like to say how proud we are to be one nonprofit trying to help all of California take a huge step, and that it's working because we're all cooperating. I'd also like to say that we are ONE nonprofit trying to help all of California take a huge step, and that we need everyone's help.

So I'm also here to make a shameless pitch for money to help us in our startup phase: (e.g.)

Pay teachers

Support administrative staff to continue the program

After the startup phase, we designed the certification program to be self-sustaining

through fees and membership dues.

The curriculum is almost complete, and we want to launch our first class in late fall or early winter. Right now, we are in an amazing situation in that all the development (worth \$250K alone) has been done so far by volunteers dedicating 100s of hours.

Even Calscape (worth 1000s of dollars) was donated. So this is a GREAT deal for you to invest in.

I hope you will all be contacting me to be involved.

(if they ask: We need about \$100K a year for the next 3 years)

(If they already hired G3, say I haven't seen the curriculum but not exclusively natives and focused on homeowners rather than landscape professionals. Actual testing that people have to pass, and they get card, and professional designation to put after their name, and CLCA and DPR and UCLA Extension Landscape Architecture program will be using our sections as continuing education, etc.)