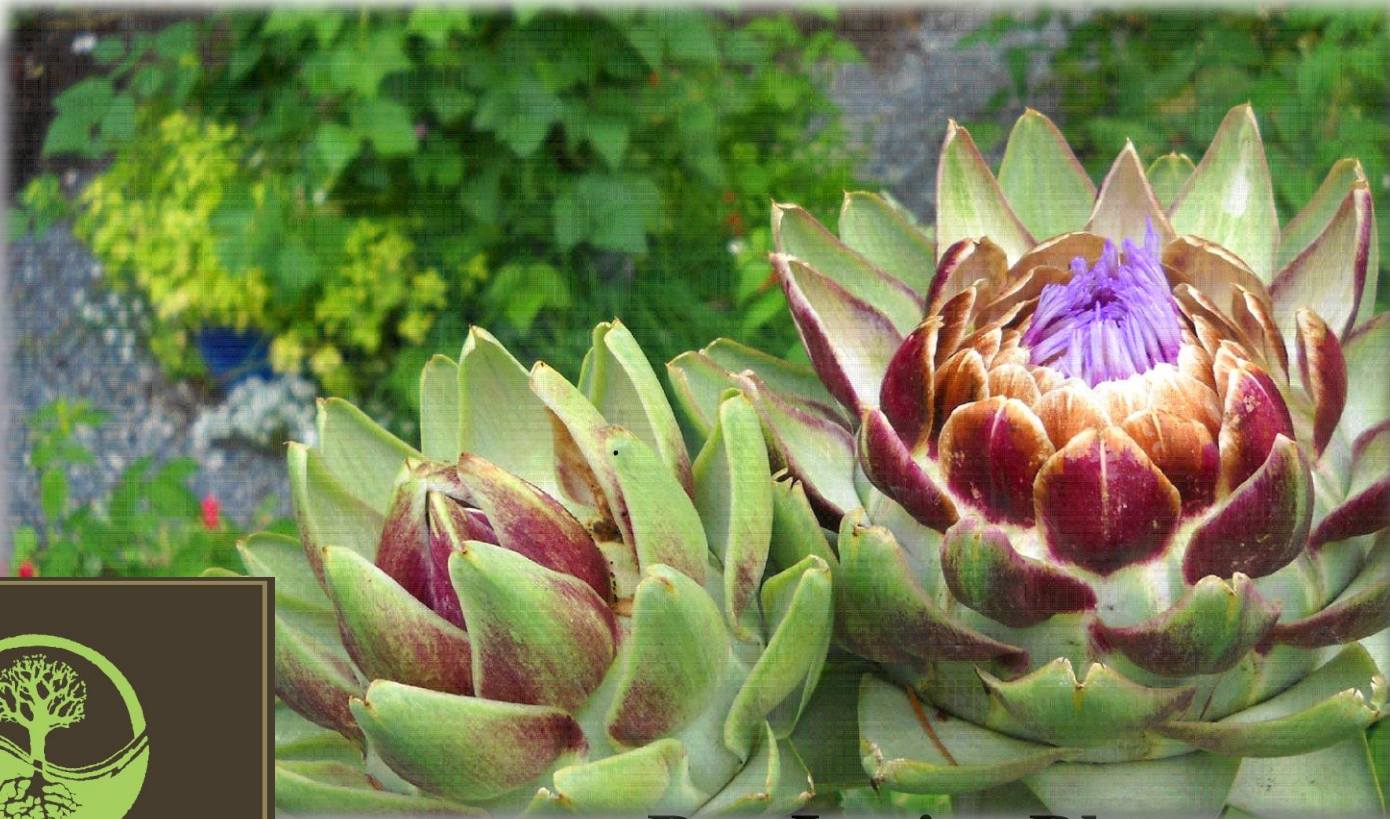


PRINCIPLES OF SUSTAINABLE LANDSCAPES



N.W. BLOOM
EcoLogical Landscapes

By: Jessica Bloom,
CPH, Certified Arborist, Author,
Owner/Designer of NW Bloom EcoLogical Landscapes



Look deep into nature, and then you will
understand everything better.

(Albert Einstein)

Who am I?

- Human (*Homo sapien*) being
- Connector
- Perspective Changer
- Context giver
- Opinionated & independent business owner
- Efficient resource manager
- Creator of sacred spaces
- Defender of humans, insects, weeds & all things in this natural world
- Permaculture ninja activist
- Travelling teacher
- Single mother of radical children (dubstep dancing machines = our future)
- Lifelong student





**How can we imitate
natural ecosystems?**



Function: to fill some niche?

Our customer defines this ultimately. We can then use our knowledge to make the landscape sustainable.

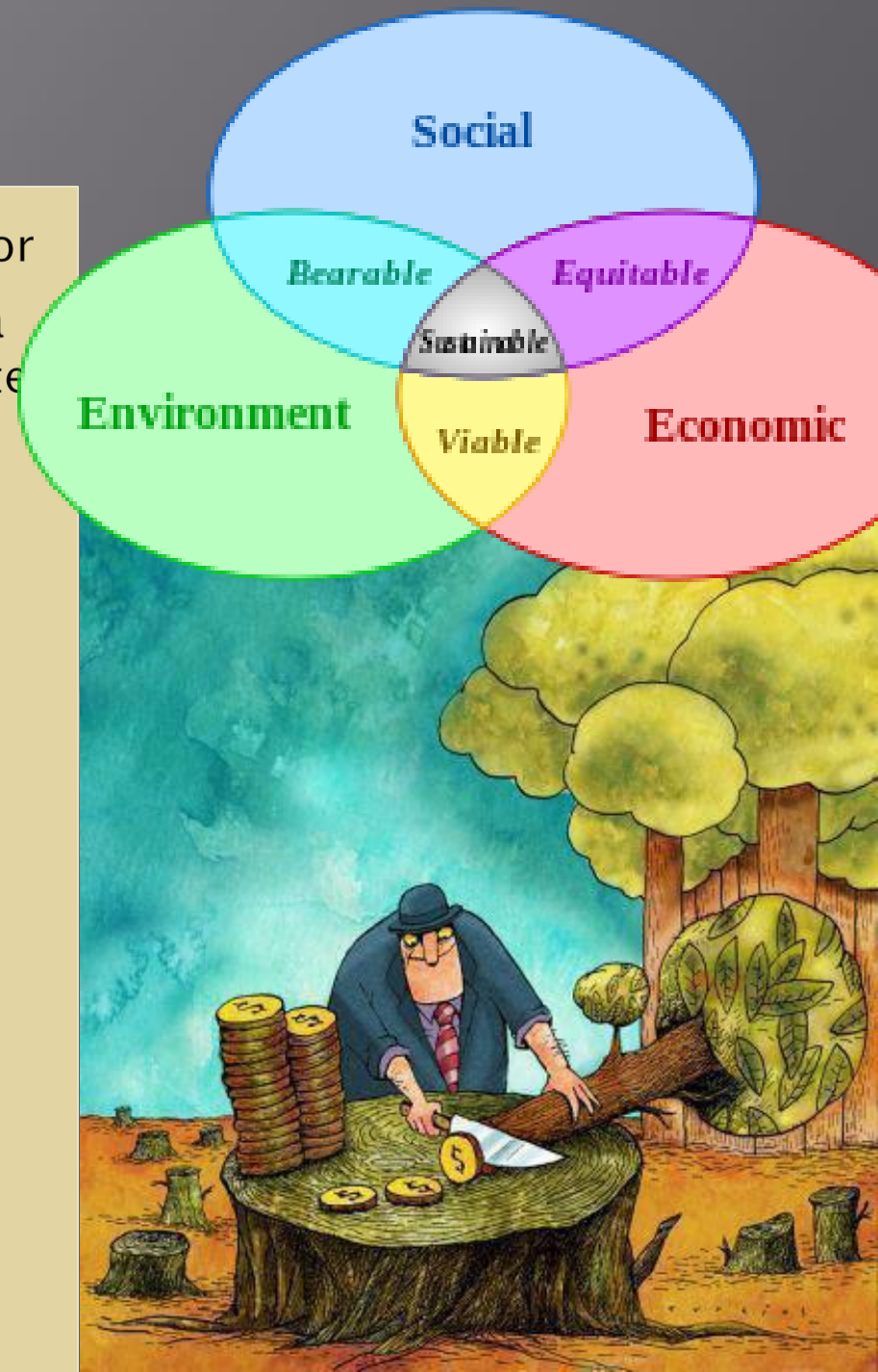
DEFINING

sus·tain·able : adj. of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged

eco·logi·cal : adj. relating to the environment and the way that plants, animals, and humans live together and affect each other

per·ma·cul·ture : Noun: The development of agricultural ecosystems intended to be sustainable and self-sufficient

Meeting human needs through ecological and regenerative design



More vocab to think about:

- ✓ **Ecological Services**
- ✓ **Inputs vs. Outputs (yields)**
- ✓ **Regenerative Design**
- ✓ **Carrying capacity**
- ✓ **Resiliency**
- ✓ **Biophilia**

Sustainable Landscape Principles

Design + Construction + Maintenance

- Protect and Conserve Soils
- Conserve Water
- Protect Water and Air Quality
- Save Energy
- Use Sustainable Methods and Materials
- Protect and Create Wildlife Habitat
- Sustain Healthy Plants
- Protect Human Health

Spectrum of Sustainable Gardeners & Customers

Buys compost instead of fertilizers

Learning new techniques and making changes

Homesteaders Living off the grid



Meet people where ever they are at



Benefits of creating sustainable landscapes

- ▣ Good (and SAFE) for everyone!
- ▣ Creates habitat
(birds, insects, humans, etc)
- ▣ Water & resource conservation
- ▣ Less maintenance (?)
- ▣ More cost effective long term
- ▣ No Chemical dependency
- ▣ Diversity - color - texture
- ▣ Food security!



What is your customers "hook"?

site analysis - outdoor use areas



How?

1. Design - plan, plan ahead!
2. Install properly
3. Establish & Maintain correctly

Know the Soils!

NCD A Agronomic Division 4300 Reedy Creek Road Raleigh, NC 27607-6465 (919) 7



Soil Test Report

3/12/04

SERVING N.C. CITIZENS FOR OVER 50 YEARS

Agronomist Comments:

Field Information		Applied Lime		Recommendations			
Sample No.	Last Crop	Mo	Yr	T/A	Crop or Year	Lime	N



(1.0 lbs										
(1.0 lbs										
Mn-I										
583										
N	P ₂ O ₅	K ₂ O	Mg	Cu	Zn	B	Mn		See Note	
(1.0 lbs Nitrogen or EQUIV PER 1000 SQ FT)									4	
(1.0 lbs Nitrogen or EQUIV PER 1000 SQ FT)									4	
Mn-I	Mn-AI (1)	Mn-AI (2)	Zn-I	Zn-AI	Cu-I	S-I	SS-I	NO ₃ -N	NH ₄ -N	Na
1421			1201	1501	374	690				3.0
N	P ₂ O ₅	K ₂ O	Mg	Cu	Zn	B	Mn		See Note	
(1.0 lbs Nitrogen or EQUIV PER 1000 SQ FT)									4	
(1.0 lbs Nitrogen or EQUIV PER 1000 SQ FT)									4	
Mn-I	Mn-AI (1)	Mn-AI (2)	Zn-I	Zn-AI	Cu-I	S-I	SS-I	NO ₃ -N	NH ₄ -N	Na
1094			663	663	315	318				1.9

What the client doesn't see



Compost on site to build soil & manage “waste”



Choose the Right Plant for the Right Place

- ❑ Exposure
- ❑ Mature size
- ❑ Water needs
- ❑ Soil needs
- ❑ Pest/Disease resistance
- ❑ Hardiness
- ❑ Wildlife habitat
- ❑ Invasiveness
- ❑ **EcoLogical Function**



Ecological Functions of plants:



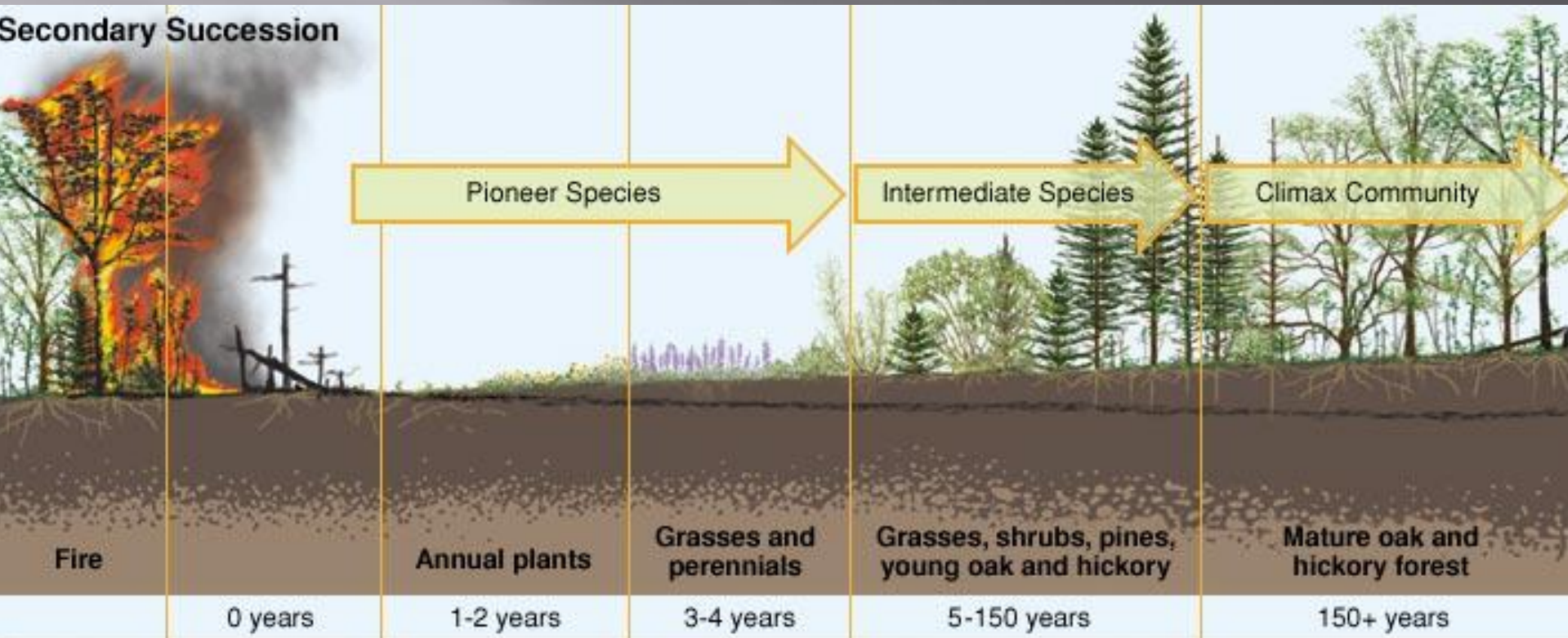
Soil Building:

- Nitrogen fixers
- Mulch/ Biomass producers
- Dynamic (nutrient) accumulators
- Soil loosening – spike roots

Fauna Support:

- Nutritional or medicinal value
- Shelter – habitat
- Insectaries - attracting beneficial insects
- Pest Repellants – secretion of compounds

Planning for succession

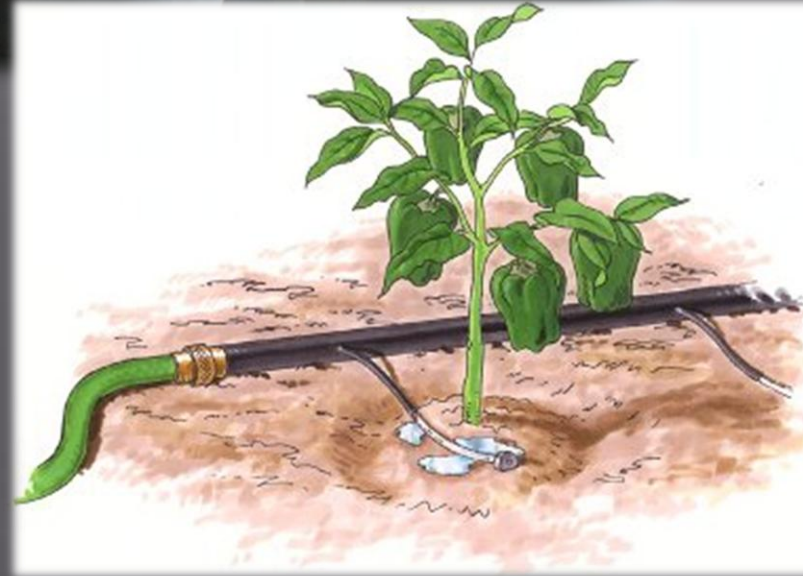
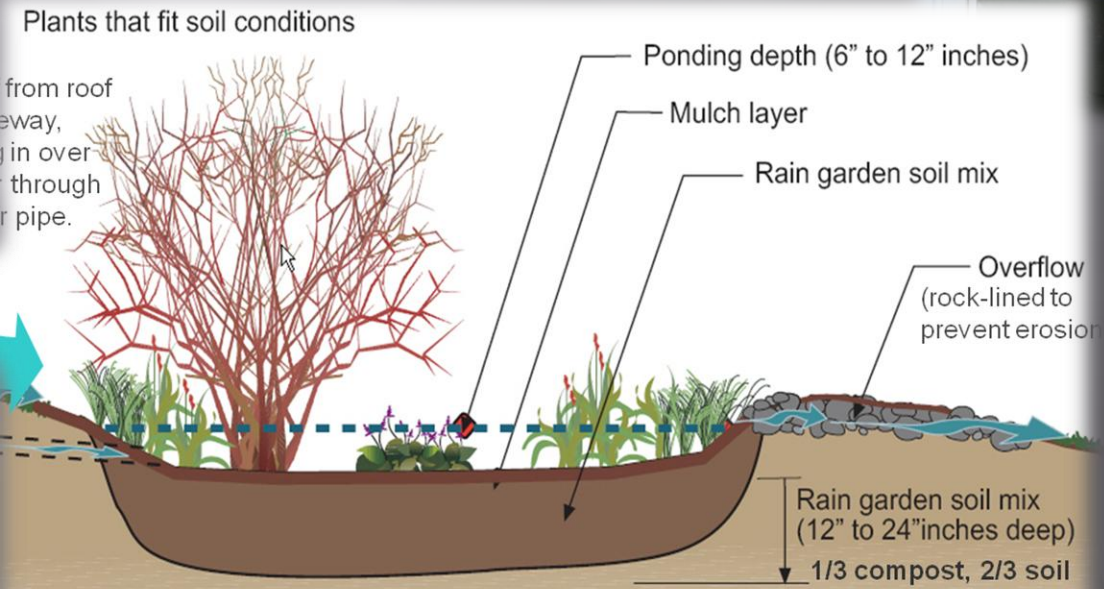


What phase(s) are your landscapes in?

Managing Water

Water

We must all be hydrologically literate

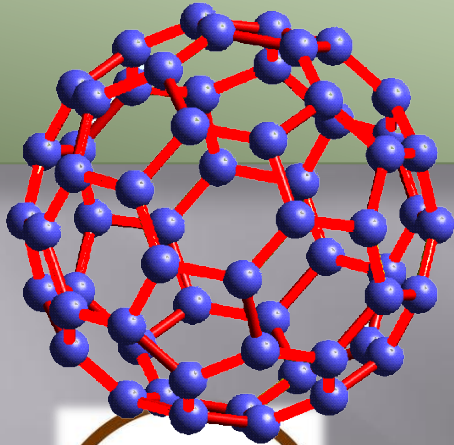


Are “Low Maintenance” landscapes a myth?

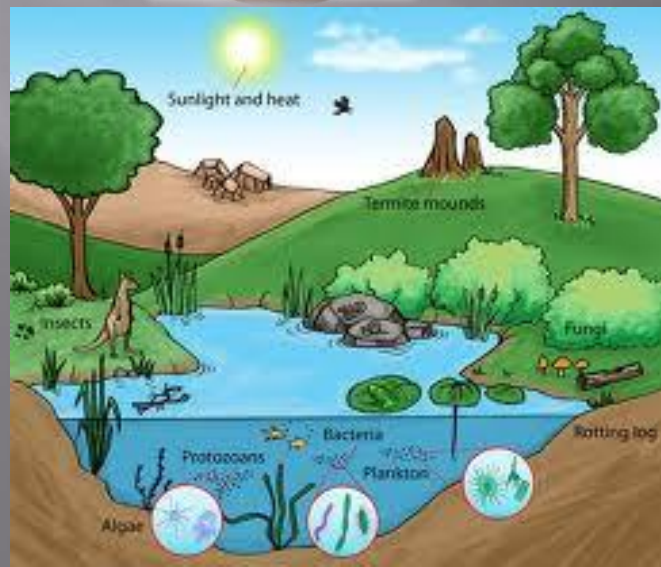
- Good design
- Right plant, right place
- Limiting exposed soil
- Groundcovers
- Expect establishment period to be high maintenance
- Temporary watering system ~ weaning landscape as needed



Landscape Management Philosophies



- Organic
- IPM – Integrated Pest Management
- Ecological/Sustainable
- Conventional



Common problems in the landscape:

Things to always keep in mind:

- Cultural conditions – site and weather
- Nutrient Deficiencies
- Susceptibility in species/ varieties

Is it just bad design?

Poor construction?

What about **mindset**?

How many of our landscape “problems” are just a perception of what is normal?



**Mulches:
they are not
all created
equal**

**What if we
matched the
mulch to the
phase of
succession?**

Organically Maintained LAWNS

- ▣ Mowing/Edging
 - ▣ Irrigation
 - ▣ Organic Fertilization
 - ▣ Aeration
 - ▣ Topdressing
 - ▣ Overseeding
 - ▣ Thatching
 - ▣ Weeding
- = (High Maintenance)**



What is a
“perfect”
lawn?



Animals:

*the good
the bad
&
the ugly*



Urban Livestock & Pets

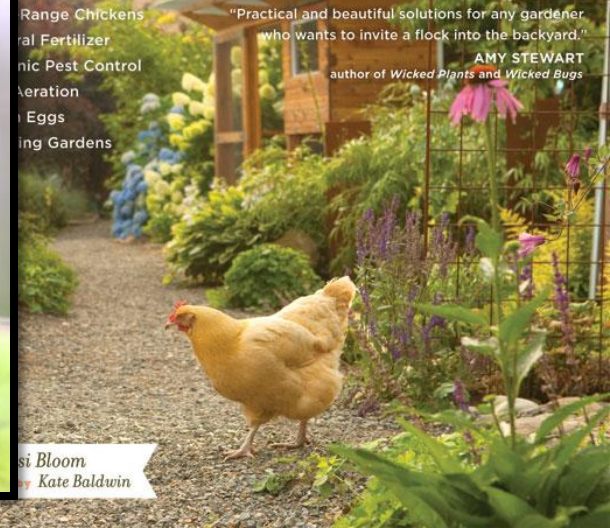


Range Chickens
ral Fertilizer
nic Pest Control
eration
Eggs
ing Gardens

"Practical and beautiful solutions for any gardener who wants to invite a flock into the backyard."

AMY STEWART
author of *Wicked Plants* and *Wicked Bugs*

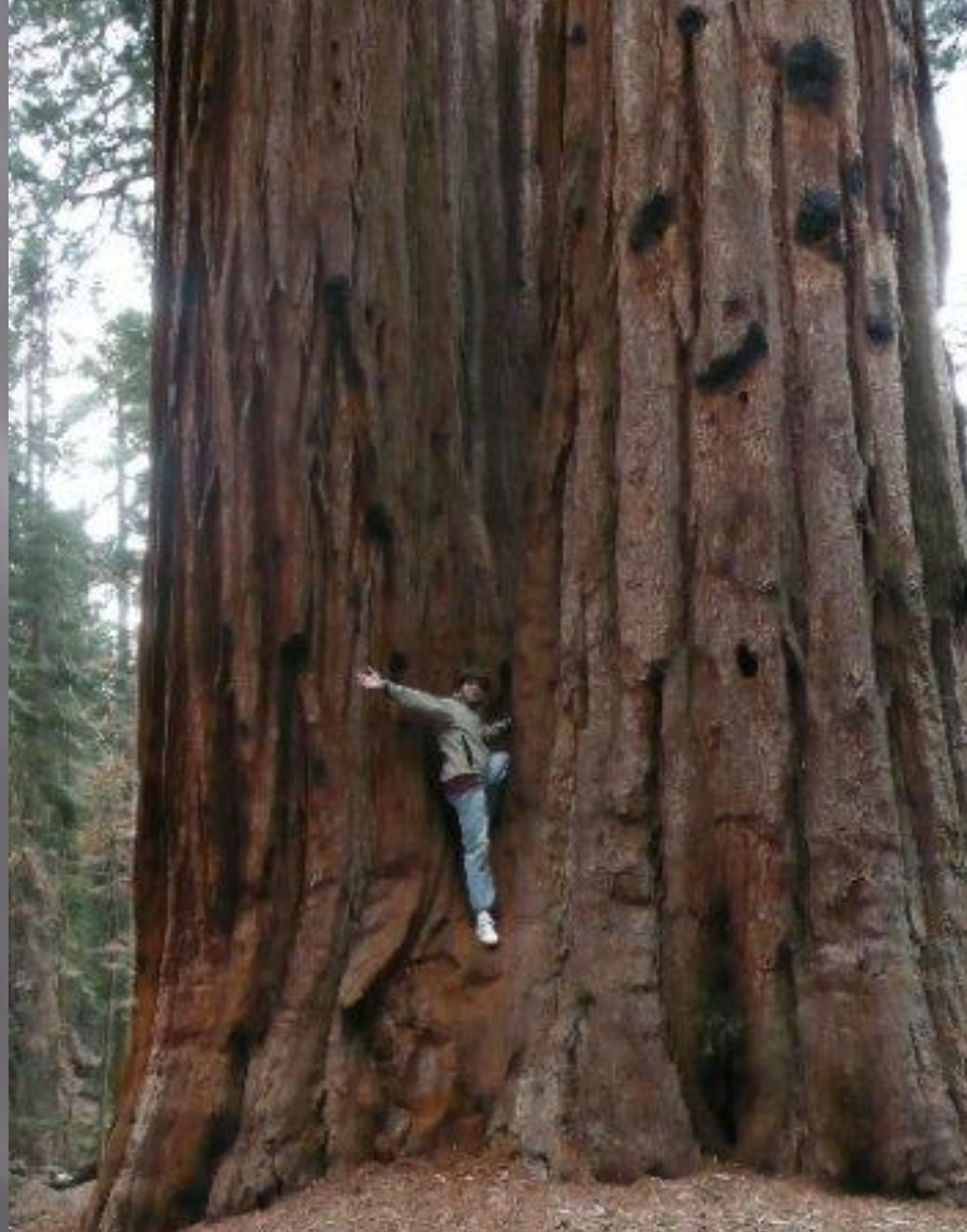
si Bloom
y Kate Baldwin



**A
fertilization
program**

~

**Who needs
synthetics?**





McCauley
PHOTOGRAPHY



**Teach tolerance and natural cycles :
Seasonal problems vs disease?**



What are weeds....?



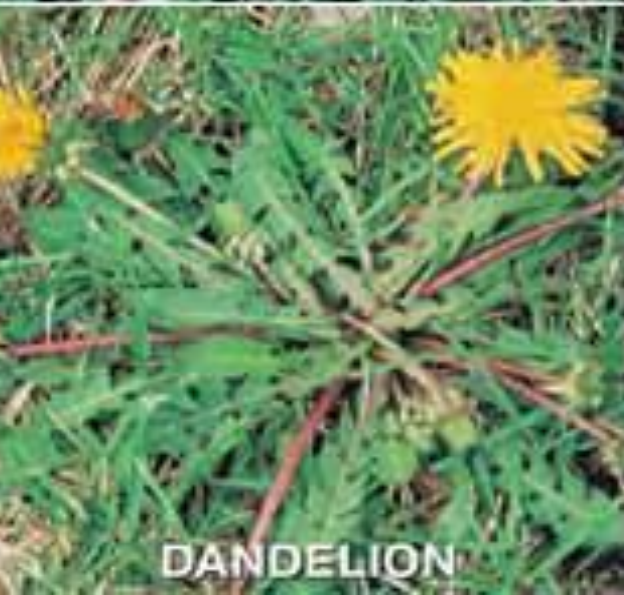
CLOVER



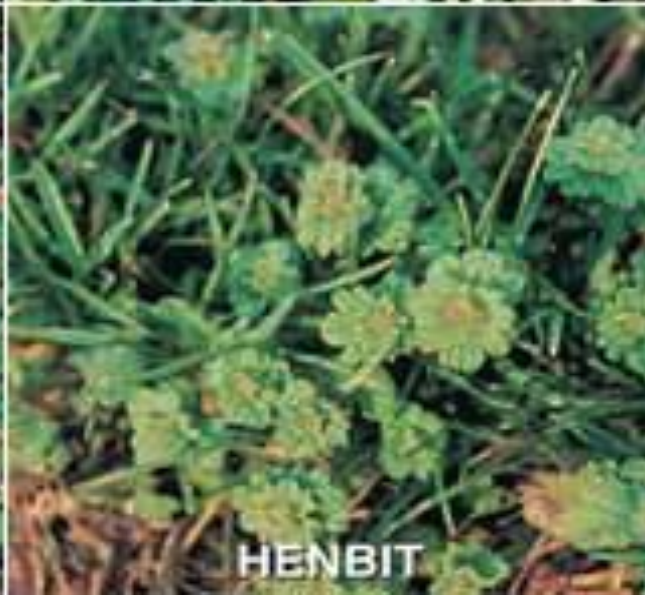
DOLLARWEED



PLANTAIN



DANDELION



HENBIT



CHICKWEED (Common)



**My plants
are
“out of
control!”**

**REVENGE
OF THE
30 FT
DAISIES**



Government funded programs pay for increased environmental stewardship

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Los Angeles News 

LADWP increases cash incentive to remove lawns

Thursday, July 04, 2013

ADVERTISEMENT



TAGS: environment, department of water and power, los angeles news, rob hayes

 Comment Now  Email  Print  Report a typo      

 Rob Hayes





How functional is this landscape?



Bayer CropScience Fights Europe's Pesticide Ban: Petition Blasts 'Bee-Killing' Chemical Giant

By Christopher Zara
on September 09 2013 8:31 PM

f 403 t 42 in 5 g+ m



Where are we in this?
And who do we work for?

As bee populations dwindle, a new class of pesticides being...

Commission's recent ban...

"If you really think the environment is less important than the economy, try holding your breath while you count your money."
—Dr. Guy McPherson



As an industry, are we ...

- ❑ Ecologically literate?
- ❑ Ready to lead, instead of letting chemical companies persuade our customers?
- ❑ Ready for the next generation of consumer?

YOU TOO CAN HELP CHANGE HISTORY
sustainability is a personal choice



Questions? Or Follow Me!



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Jessica Bloom



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Practical Permaculture Design
N.W. Bloom EcoLogical Landscapes
Chicken Gardens

