

# Do This, Don't Do That!

*With Norm Schilling*



A vibrant garden scene featuring a curved concrete path leading to a glass-topped table with four black metal chairs. The garden is filled with various plants, including tall palm trees, flowering shrubs, and a swimming pool in the background. The text "Designing Your Garden Space" is overlaid in the center in a bold, orange font.

# Designing Your Garden Space

# Separate Into Hydrozones



Moderate



Desert

# Plant Plants Where They Like It

- Sun lovers in the sun, shade lovers in the shade
- Take advantage of eastern and protected exposures



# Watch Out for Utilities

- Be aware of above ground *and* below ground utilities
- Know where they are, so we don't have to kill or mutilate beautiful trees later!



# Give Tree Roots Room to Grow



# Use These Shrubs as Trees Near Walls



Arizona Rosewood (*Vauquelinia californica*)



Texas Mountain Laurel varieties (*Sophora* sp.)

# Use These Shrubs as Trees Near Walls



Twisted Myrtle (*Myrtus communis* "Boetica") and  
Mock Orange (*Pittosporum tobira* and *P. tobira variegata*)





# Be Mindful of Mature Plant Size



# Don't Set Yourself Up For Continuous Maintenance



# Watch Out for Litter Around Pools



# Don't plant these *REALLY CRAPPY* plants

- Red-tip Photinia (*Photinia x fraseri*)
- Privet (*Ligustrum* sp.)
- Fortnight Lily (*Dietes* sp.)
- Queen palms (almost never!)
- Carolina Cherry Laurel (*Prunus caroliniana*)
- Chitalpas (*Chitalpa tashkentensis*)



Red Tip Photinia & Chitalpa



Queen Palm & Fortnight Lily

# Arrange Plants to Draw the Eye into the Landscape



# Arrange Plants to Draw the Eye into the Landscape





# Don't Put Big Plants Toward the Front



# Take Advantage of Microclimates

- Eastern exposures and filtered shade beneath existing trees
- Northern exposures next to buildings and walls need shade lovers
- Southern and western exposures are HOT, HOT, HOT



# Keep Pokey Plants at a Distance



# Decorate with Color, Texture, and Form



A lush garden scene featuring a wooden bench on the left, a large tree on the right, and a stone path leading through various plants and rocks. The text "Choosing a Good Plant from the Nursery" is overlaid in the center in a bold, orange font.

# Choosing a Good Plant from the Nursery

# Watch out for Girdling Roots



- Do the wiggle test
- Watch out for heaving soils
- Cut the root ball vertically
- Tree death can occur decades later

# Girdling Roots Kill Trees!



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# Reject Trees that Aren't Well-Rooted



# Exposed Trunks Sunburn



# Watch Out for Narrow Angles in Trunks and Branches!



# Avoid Trees With Skinny Trunks



- Seek trees with branches along the trunk
- Don't prune off low branches at first – head them back

# Planting & Staking



# Plant at the Right Depth

- Dig 2+ times wider, but no deeper than nursery pot
- Check for root flare on trunk for right planting depth
- Planting too deep causes roots to smother or trunks to rot!



# Don't Plant Too Deep



# Don't Plant Too Deep





# Cut Roots, But Be Gentle!

- Use gentle pressure on the sides of the nursery container to loosen
- If resistance is encountered, cut the root
- Cut the roots by vertically slicing with *sharp* hand pruners
- Other than slicing, handle the root ball gently
- Cutting roots does short-term damage, but can save the tree 20 years later!

# Make My Stake Well Done!

- Remove nursery stake on day one
- If needed, replace with 2-3 stakes set well away from trunk
- Allow movement of the trunk
- Remove the excess (rubbing portion) of the stakes



# Just, Don't . . .



# Check Stakes & Ties Often and Remove Within 1-2 Years



# Check Stakes & Ties Often and Remove Within 1-2 Years



# Don't Crowd Plants



# Give Each Plant Room to Grow



Be Patient - A New Landscape *Should* Look Sparse!







# Amending the Soil

# Do Amend the Soil for Moderate Water Plants

- 15 to 20% well-decomposed organic matter by volume
- Soil sulfur (dissolved) to reduce soil pH
- Bone meal for a long-term phosphorous source
- A slow-release, organic fertilizer with micro-nutrients (Gro-Power 3-12-12)



# Don't Amend the Soil for Desert Plants

- Choose plants that thrive in your native soil
- Desert plants should not have soils amended, merely loosened
- Desert plants that can take more water can exist in either state, but it is better if their soils are only lightly amended, if at all



A photograph of a garden bed featuring several round, spiny cacti with yellow flowers, a large agave plant with variegated leaves, and purple foliage. The ground is covered in dark brown mulch and scattered grey rocks. In the background, there is a stone birdbath on a pedestal, a paved walkway, and a dining table with chairs. The word "Mulch" is written in large, bold, orange letters across the center of the image.

**Mulch**

# Use Organic Ground Cover for Moderate Water Use Plants

- Wood chip products make the best mulch
- Over time (usually 2 to 5 years) the mulch will decompose and greatly enhance soil fertility and structure
- Since it does break down, it should be replaced on an as-needs basis
- Beware the blowers!



# Use Rock Mulch for Desert Plants

- Desert plants perform fine in rock mulch, and actually prefer it
- Desert plants that can take more water can exist in either type of mulch
- Smaller rocks create a softer look, and are easier to clean
- Beware the ZEROscape!



# Pruning



# Don't Prune Too Much in One Year!

- Rule of Thumb – 25% in 1 year
- Prune less on challenged species, older trees, and stressed or diseased specimens
  - ~5-10%, or not at all (except deadwood)
- Don't "lion-tail," leave some inner foliage





# Don't Stub-Cut, Do Work with a Tree's Natural Form



# Don't Top Trees



# Removing Branch Entirely



# Cutting Back to a Lateral Branch

- Cuts to a lateral branch slows the branch down, by reducing energy production and taking away the leader
- This is a good method for slowing a branch down for later removal, to reduce total foliage removal



# Remove All Dead Wood

- A dead branch stub prevents closure of wounds
- Allows easier entrance for pests and diseases
- Prune dead wood away, but don't cut into the live wood



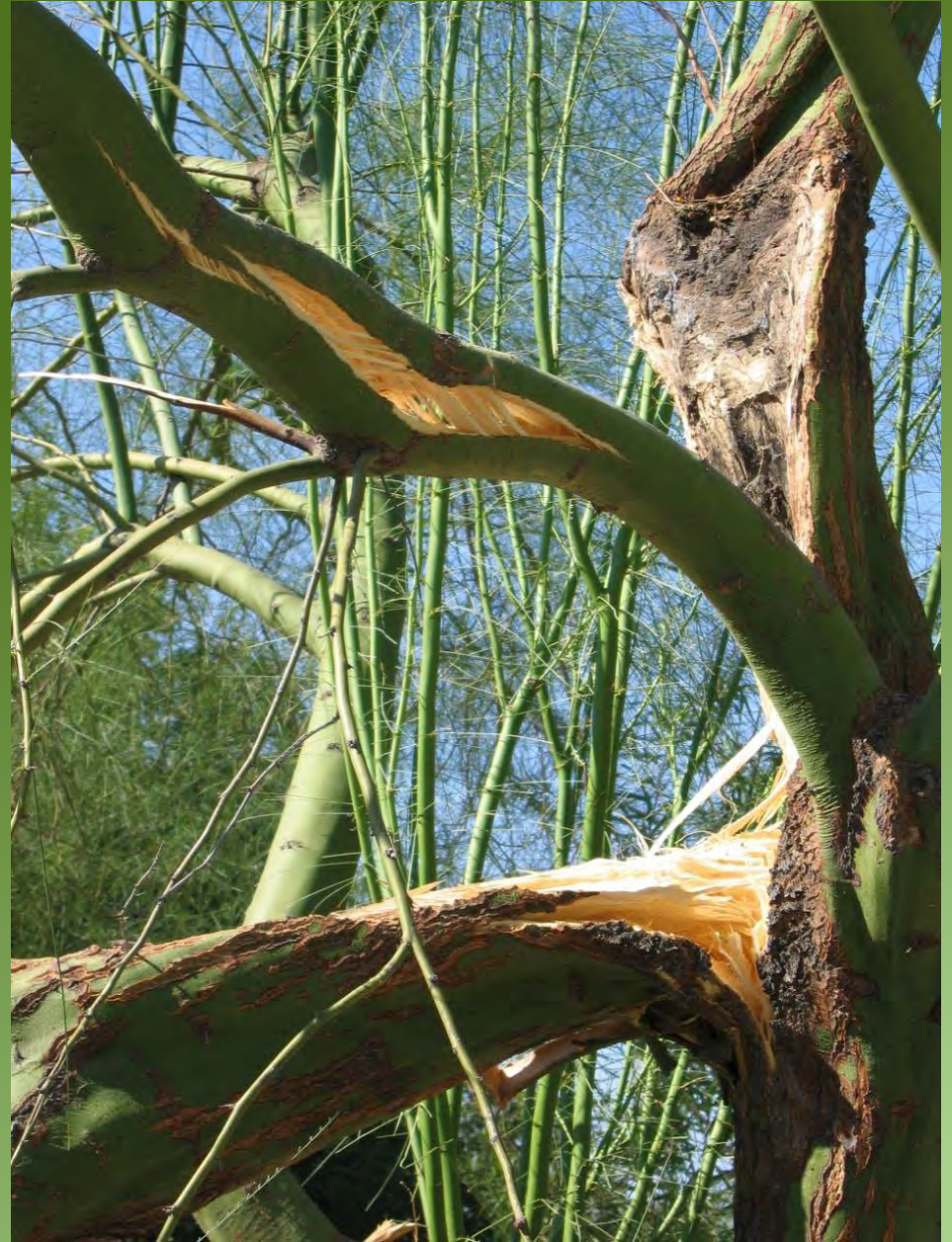
# Remove Crossing & Rubbing Branches

- Wounds that rub never heal, and that causes stress and weakness
- Branches should orient outward, like the spokes of a wheel
- Remove branches that cross into the canopy



# Remove Weak Crotches

- When 2 branches have a narrow angle of attachment, remove 1
- Bark can get pinched inbetween
- Bark is non-living tissue and keeps wood from continuing to grow together
- Remove weak crotches early



# The 3-cut Method





# The 3-cut Method



# The 3-cut Method



# A Good Gardener Should Have a Hard Heart and a Sharp Axe



# Prune Grasses Well in the Spring



Cut grasses down flat, to about 1 to 6 inches, depending on size of plant



# Don't Leave a Ball of Old Grass in the Middle



# Some Plants Shouldn't be Pruned



# Don't Use Hedge Clippers



# Do Hand Prune





# The Ugly Kind of Hedge



# The Pretty Kind of Hedge





# Irrigation

# Hydrozones

- Create hydrozones by plants' water needs, not by plant type
- The difference between desert plants and non-desert plants is *how often* they should be watered



# Don't Change How *Long* You Irrigate Your Plants, Just How *Often*

## *How Long?*

- “Run time” - how many minutes or hours the water runs
- Will *not* fluctuate throughout the year

## *How Often?*

- Frequency (days per week or month)
- Will fluctuate throughout the year

# Hydrozones

- Each hydrozone should have its own separate valve
  - Moderate
  - Desert
  - Pots
  - Orchard
  - Veggie beds



# Turf Grass = Moderate Zone

- A turf-grass lawn and its surrounding area (10'+) should always be considered moderate water use
- Do *not* plant desert trees near turf grass!



# Don't Use Spray Irrigation on Landscape Plants

- Inefficient style of watering
- High-pressure, high-volume
- Over-spray
- Run-off
- Evaporation





# Use Drip Irrigation When Possible

- Efficient method of watering
- Low-pressure, low-volume
- Water is delivered to each individual plant
- Slow, steady drip leaves no run-off nor evaporation



# Or Perhaps Inline Irrigation

- Output determined by hole spacing
- Efficient way to deliver water to groups of plants
- Best for veggie beds, annuals, and turf
- More labor and expense to install



# Don't Over-Water Desert Plants

- Desert plants can rot out if over-watered
- Some plants don't like their feet wet
- Place emitters 12" or more away from cacti
- Shut off valves on cacti and succulents to turn off in winter

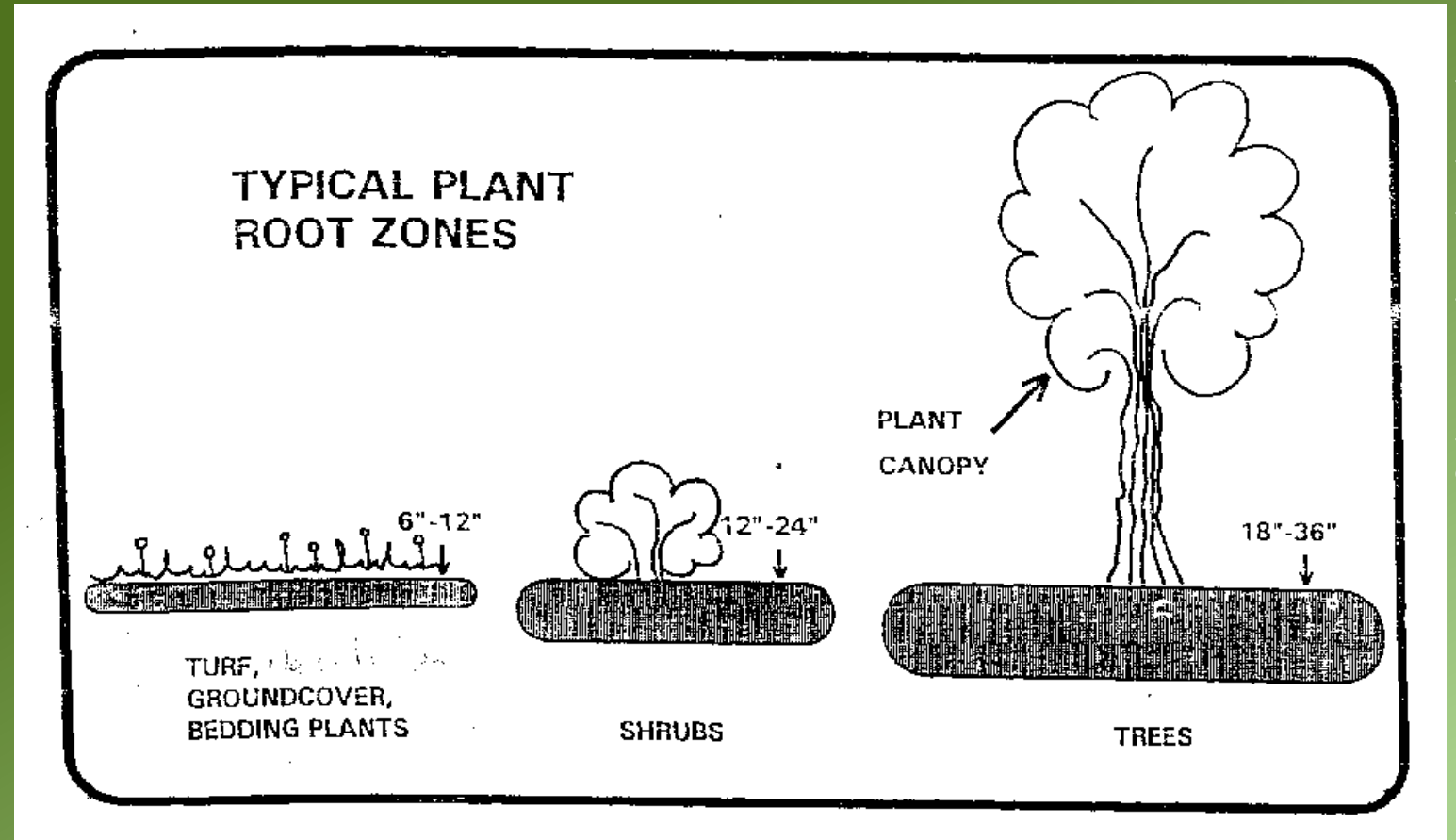


# Some Plants Don't Like Their Feet Wet

- **Chaparral Sage** (*Salvia clevelandii*)
- **Italian Cypress** (*Cupressus sempervirens*)
- **Texas Mountain Laurel** (*Sophora* species)
- **Valentine Bush** (*Eremophila maculata* 'Valentine')
- **Euphorbia** (*Euphorbia* species)
- **Blackfoot Daisy** (*Melampodium leucanthum*)
- **All Texas Rangers** (*Leucophyllum* species), but especially Cupleaf Sage (*Leucophyllum zygophyllum*)
- **Mulga Tree** (*Acacia anuera*)
- **Lavender** (*Lavendula* species)
- **Wholly Butterfly Bush** (*Buddleja marrubifolia*)

# Water Plants Deep and Wide

- Water trees to a depth of 24"
- Shrubs to 18"
- Grass to 12"
- When you water your shrubs and perennials you also water the trees
- Water infrequently to allow air into soil



# Water Plants Deep and Wide



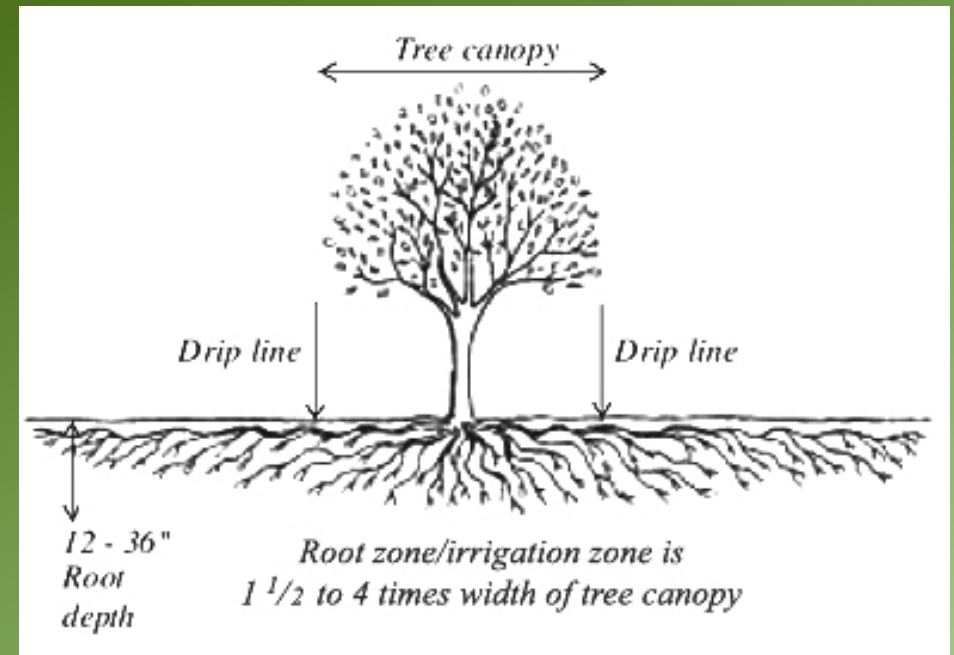






# Create a Wetting Pattern for the Plant at Maturity

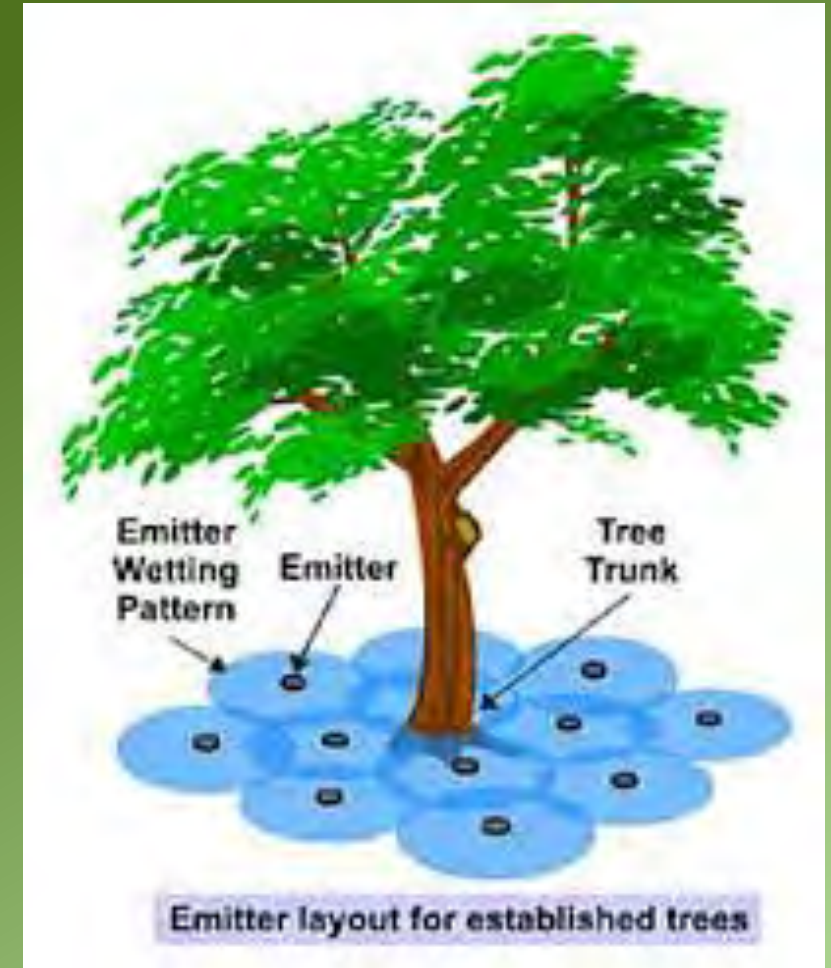
- Small plants (up to 2-3 feet) should have 1 emitter
- Small shrubs (2-4 feet) should have 2 emitters
- Medium shrubs (5-6 feet) should have 3 emitters
- Large shrubs (8-10 feet) should have 7-9 emitters
- Trees (based on size) should have access to the water from many emitters



<https://oakcreeknursery-ks.com/watering-instructions-new-plantings/>

# Place Emitters Around a Tree 3 to 6 Feet Apart

- Gives trees stability in winds
- Allows for greater nutrient availability
- Small plants beneath or near larger plants can be considered part of the larger plants wetting pattern
- Adding emitters when the irrigation system is installed or as the tree grows



# Plants Need a Wetting Pattern That Corresponds to Their Eventual Size



# A Beautiful Inline Wetting Pattern



# Sustainability



If You're Going to Use Water, Get Something Out Of It



# If It is Strictly Eye Candy, Plant Desert Natives



# If It is Strictly Eye Candy, Plant Desert Natives



## *Desert Natives. . .*

- Like our soils
- Have more variety in foliage colors
- Have longer bloom seasons
- Are lower maintenance and less frustration
- Offer bold texture, structure, and form
- Are just really darn pretty



# Minimize Unnecessary Fescue Turf Areas



How are these areas going to be used?

# Plant A Low Water Use Lawn (*if you must*)

## *Turf alternatives*

- Buffalograss blends
- Native fescue – Sheep Fescue (*Festuca ovina brachyphylla* or *F. arizonica*)
- Blue grama (*Bouteloua gracilis*)
- Sideoats grama (*Bouteloua curtipendula*)



Legacy Buffalograss

# NEVER Plant Green Fountain Grass (*Pennisetum setaceum*)



- Invasive
- Allergenic
- Destroys native plant habitats
- Not good forage for grazing animals

# Plant Pretty and Non-Allergenic Grasses



Bull Grass



Black Moudry

# Avoid I

- Aphids a potatoes
- Fewer p
- Use the man & n
- Practice Manage

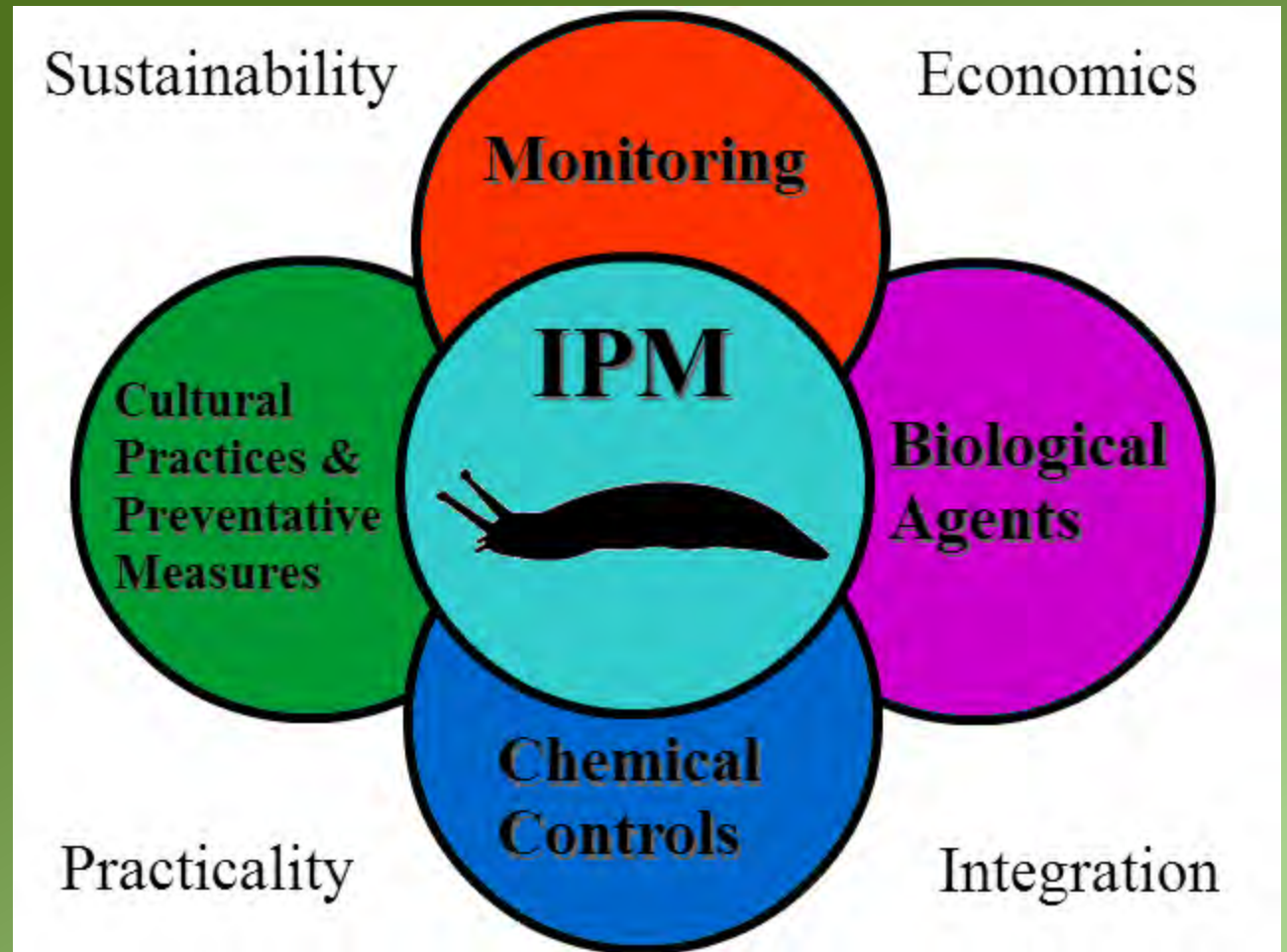


**Heads up!**  
Don't mistake ladybug  
eggs and larvae  
for aphids for pests!



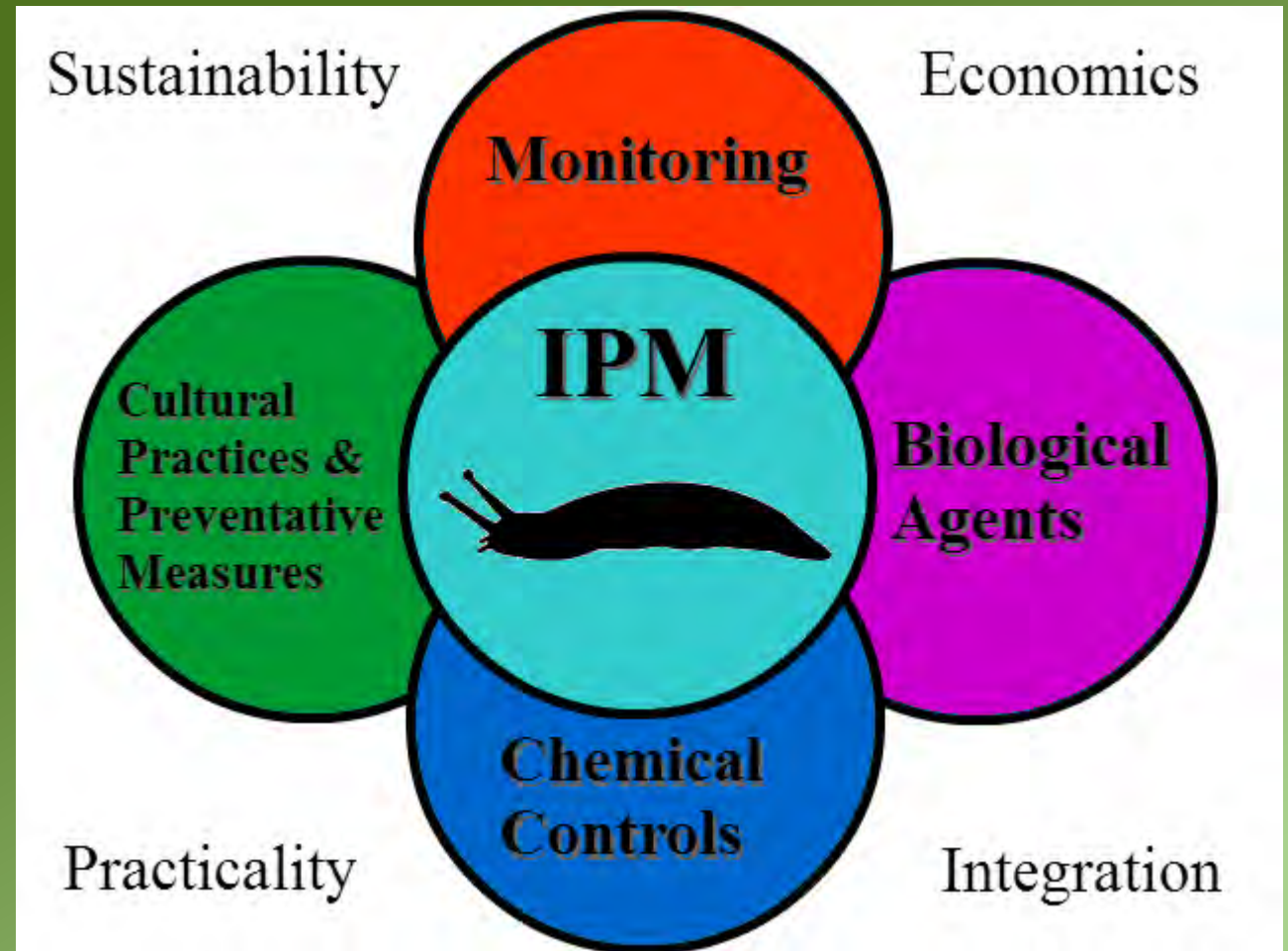
# Integrated Pest Management

- Acceptable Pest Levels
  - Emphasis on *control*, not *eradication*
- Preventive Cultural Practices
  - Selecting varieties best for local growing conditions
- Monitoring
  - Regular observation of plants
- Mechanical Control
  - Hand-picking, traps, barriers, soapy water



# Integrated Pest Management (*continued*)

- Biological Controls
  - Beneficial insects (ladybugs, lace wing larvae)
    - Rincon-Vitova Insectaries
  - Biological insecticides (Bt, nematodes, and fungi)
- Responsible Use of Synthetic Pesticides
  - Application technique should match the unwanted pest
  - Must reach intended target
  - Low-volume spray equipment will reduce overall pesticide use



Thank You for  
Coming!

Join Norm again on March  
14<sup>th</sup> from 6pm to 8pm for  
*Overused, Underused and  
Misused Plants and The  
Very Drought-Tolerant  
Garden*

