

Course learning objectives

- Seasonal care needs for your rain garden
- Irrigation schedule and tips during plant establishment
- Resolving potential rain garden issues

Let's take a moment to reflect...
Draw/diagram/write what a "rain garden cycle" is.



What is your relationship to your rain garden?

“Maintenance” or “Care” ?

“A Chore” or “Fulfilling” ?

Please share in the chat box.





Which rain garden is improving with time?

What's wrong with this maintenance regime?





It's time to rethink our landscape care!

Agenda

1. Seasonality
2. Essential Tools
3. Soil Health
4. Watering + Irrigation
5. Weeding
6. Plants
7. Discussion





Five Sonoran Desert Seasons



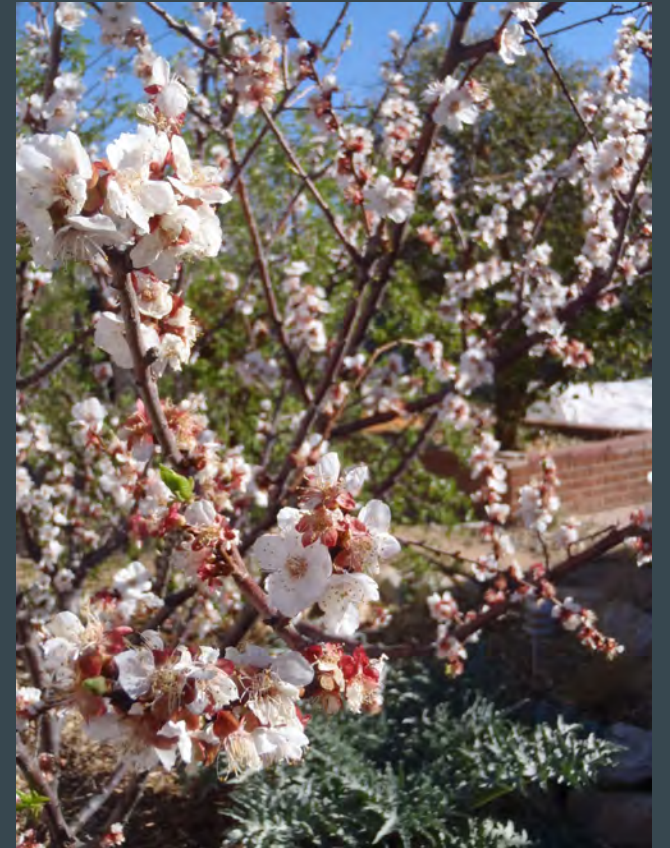
Winter (Dec – Feb)

cold, wet, calm, and dormant



Spring (March – April)

warm , bloom ing, and active



Dry Summer (May – June)

h o t , d r y , a n d d o r m a n t



Monsoon (July – mid-Sept)

hot, wet, and exciting!



Fall (mid - Sept - Nov)

warm , dry, and vibrant



Essential Tools

Shovels:

- flat (shaping)
- spade (digging)

Rakes:

- hard (shaping, sifting)
- leaf (dressing)



Essential Tools

Pruning:

- hand pruners (chop + drop, deadheading)
- loppers (new tree/old shrub growth)
- saw (old tree growth)



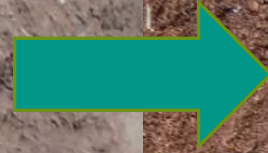
Essential Tools

Weeding:

- stirrup/hula hoe (annuals, shaping)
- hand pick (tough, thorough weeding)



Building Soil Health



Water + Carbon (Organic Material) = LIFE!

*Follow these four steps and you can
build healthy soil!*

(1) Plant the Water:
Increase soil
moisture &
spark life

(2) Protect Soil:
Minimize erosion
& eliminate
chemicals

**(4) Plant Your
Ecosystem:**
Promote roots,
ground covers
& nitrogen fixers

**(3) Mix in
Organics:**
Put organics
in your yard,
not the landfill

Note:

1. Water?
2. Stabilize?
3. Organics?
4. Plants?



Note:

1. Water?
2. Stabilize?
3. Organics?
4. Plants?



Fresh tree trimmings applied to a rain basin.

After a good soaking rain the fungal organisms send up fruiting bodies - MUSHROOMS! - a good sign that decomposition is occurring!



**SEE HOW
MULCH TURNS
INTO SOIL!**



With the right moisture conditions present in a rain basin the tree trimmings quickly start to create a thin organic layer at the soil surface which helps re-build healthy soil.

See the white substance? It's fungal hyphae beginning to decompose the mulch and transport nutrients into the soil.

Do I need to add more mulch?

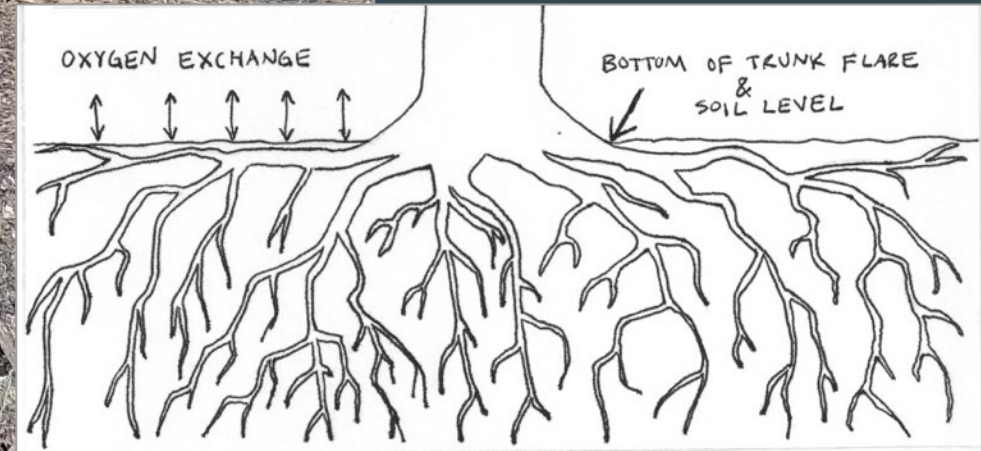
Rules of Thumb:

- Upland areas: 1-2 inches
- Rain basin bottoms: 2-4 inches



Chop + Drop! & Leave it Be!





Heartwood Tree Company

Watch out for buried root flares/root balls!

Questions?



What do you see that needs to be irrigated?



Irrigation Guide for Rain Garden Establishment

1st Year: Nurture them now for stronger plants later.

- Water deeply right after you plant, then every 12 days for the first 2 weeks
- then based on the season:
 - Dry summer: water 2 times per week
 - Wet summer: water as needed (2 times per week) based on available rainfall
 - Fall, Winter and Spring: water every 4-2 weeks depending on rainfall during the winter season

2nd Year: Begin to wean your plants off supplementary irrigation.

- Dry summer: water one time per week during the
- Wet summer: water as needed (no more than 1 time per week) based on available rainfall
- Fall, Winter, and Spring: water 4-2 times per month

3rd Year and beyond: Let the rain do the work!

- Water monthly (only if needed) during dry summer months or times of drought



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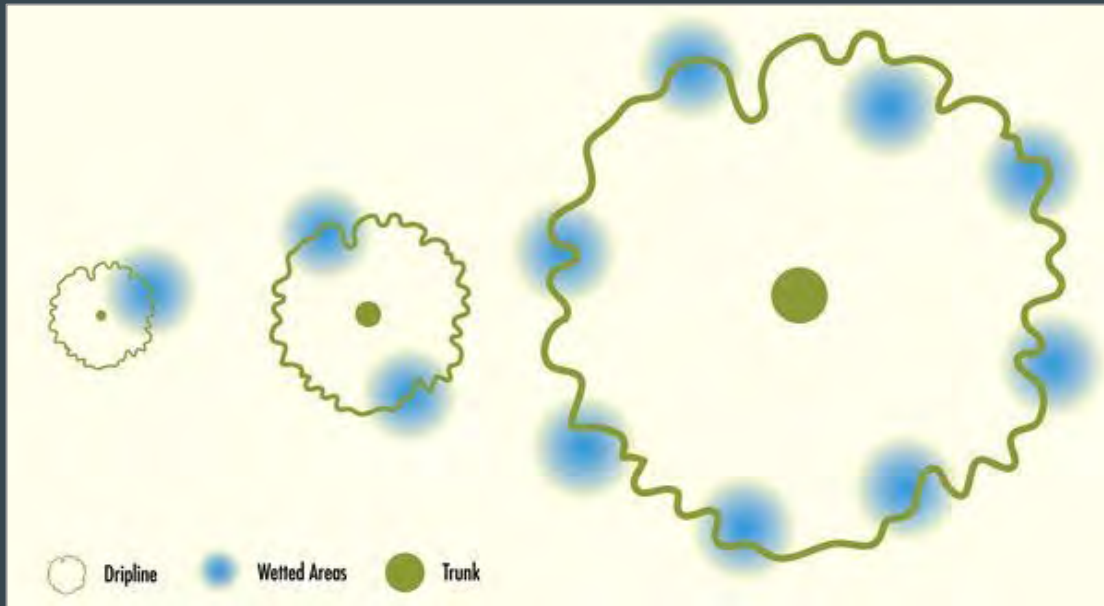


How should I water?

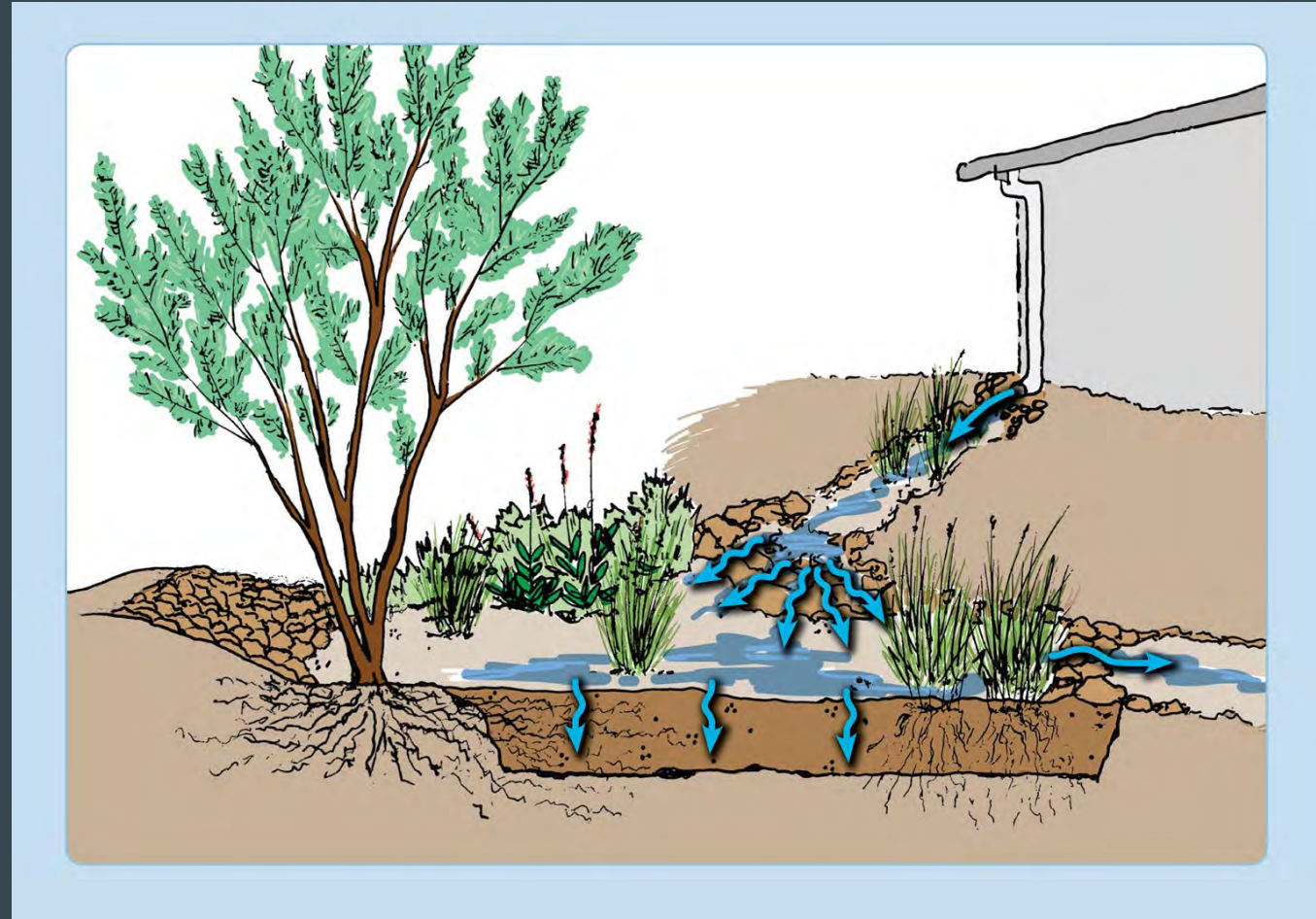




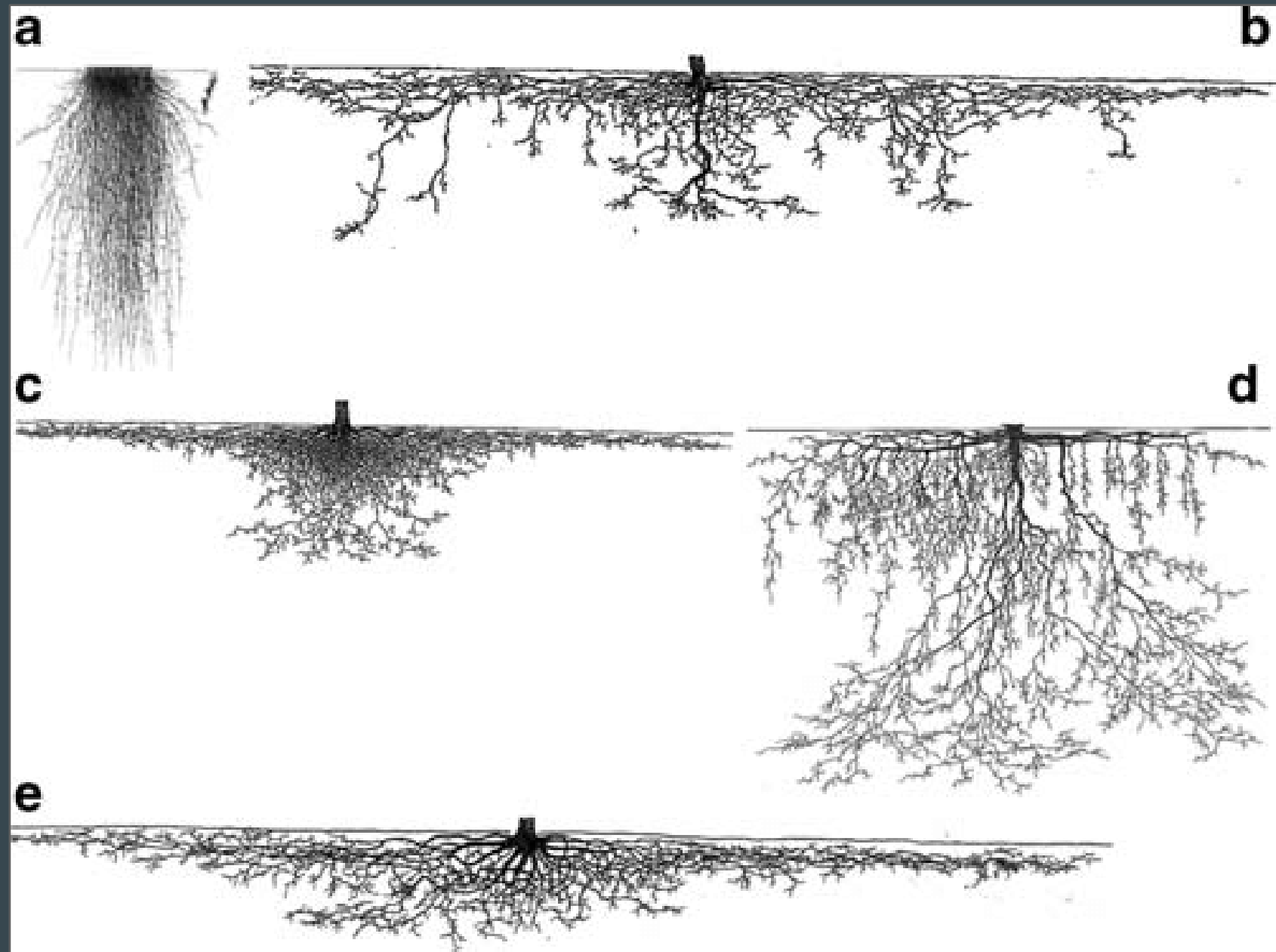
Plant Establishment Irrigation



AMWUA



Promoting Strong Root Structures



Ghestem, Murielle & Sidle, Roy. (2011). The Influence of Plant Root Systems on Subsurface Flow: Implications for Slope Stability. *BioScience*. 61. 869- 879. [10.1525/bio.2011.61.11.6](https://doi.org/10.1525/bio.2011.61.11.6).

Plants!!

- Native
- Non-native
- Desert-adapted
- Ornamental
- Invasive



What is a weed?





The bad

Cheeseweed



London rocket



Filaree/Stork's bill



Ivyleaf Morning Glory



The bad

Malta star thistle



Stinknet



AZ Native Plant Society

African sumac
(Invasive tree)



Arundo



The bad

Red brome



Buffelgrass



Fountain grass



Bermuda grass



The scrappy

Purslane (verdolagas)



Hyssopleaf
Broomspurge



Woolly Tidestromia



The scrappy

Amaranthus
fimbriatus



Pigweed (amaranth)



The good

vs.

The bad

AZ Caltrop



Goat's head





Questions?



Finding native replacements

AZ Rosewood, *Vauquelinia californica*



Pinterest

Oleander, *Nerium oleander*



plantmaster.com

Finding native replacements

Gooding's Verbena,
gooddingii



bloomingatacademyvillage.org

Verbena

Lantana spp.



Mountain States Wholesale Nursery

Finding native replacements

Deer grass
Muhlenbergia rigens



Fountain Grass
Pennisetum setaceum



National Park Service

Native GRASSES



Seasonal Care

Early Spring

- Pruning winter die-back
- Tree and shrub pruning



Seasonal Care

Late Spring and Fall

- Deadheading
- Seed collection



Say no to hedging!



Cacti

- Cochineal infestations
 - Remove heavily infested pads
 - Spray with high pressure hose (and dish soap/water mixture)
 - Predated on by ladybugs

chinleactusclub.com



Mistletoe



audubon.org/field-guide/bird/phainopepla



TREES

“Right plant, right place”



TREES

NO “lion - tailing” or topping



sonorantreesvc.com

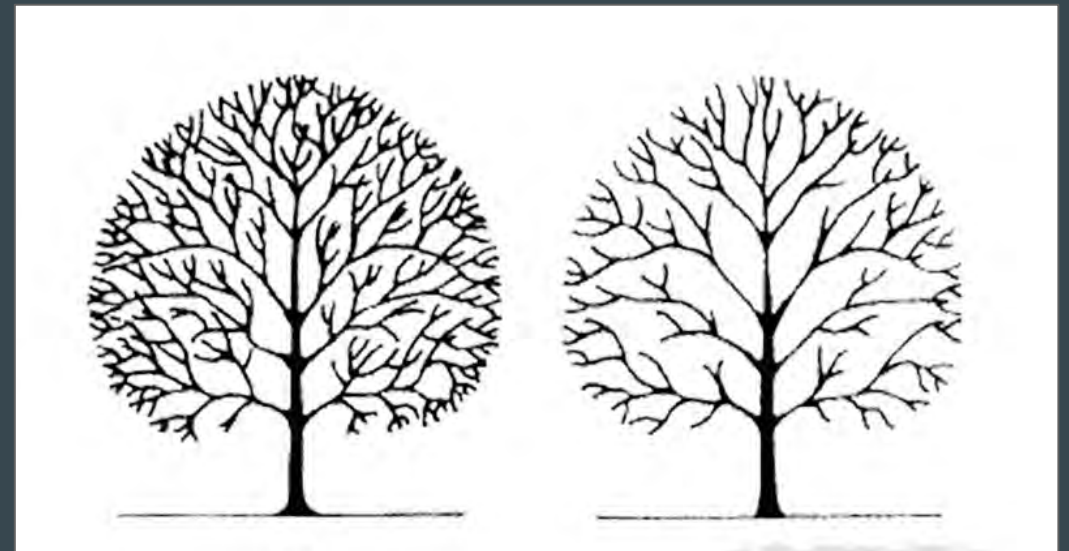


mydailytribune.com

TREES

Crown cleaning

thinning



terrehauttreeservice.com

TREES

remedial pruning



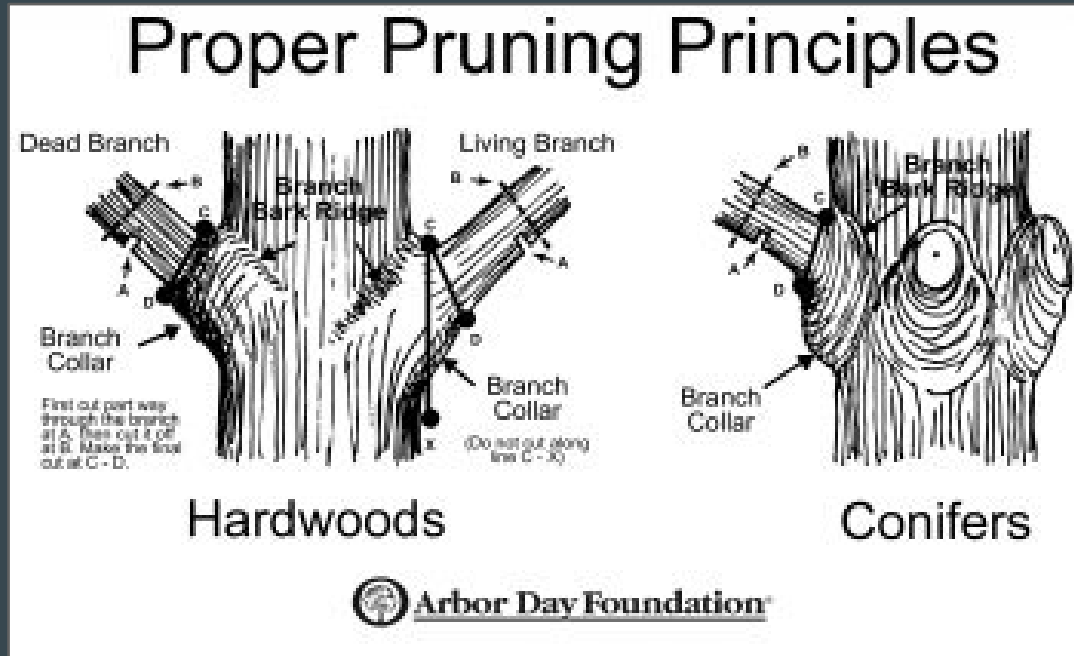
Hack Jobs



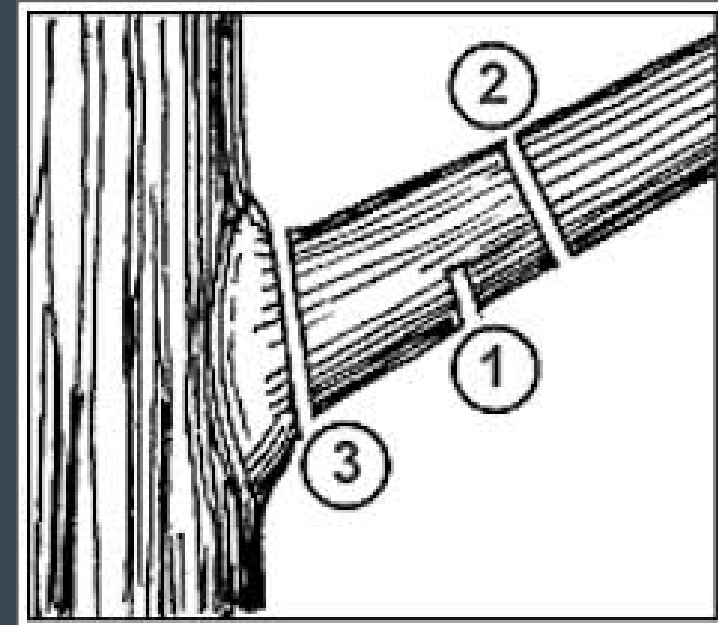
Hack Jobs



Tree Pruning Technique



Three Cut Method:



University of Missouri Extension

Let's stop "cleaning" landscapes!



Let's start nurturing landscapes!

Natural Aesthetic

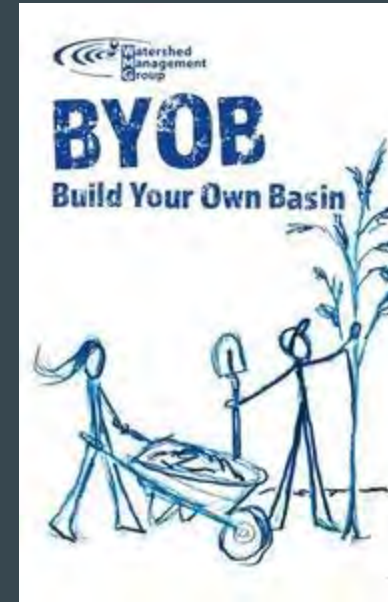


Wild Aesthetic



WMG Resources

watershedmg.org/learn/resource-library



watershedmg.org/BYOB