

Gardening for Beginners Week 4: Working in the Garden



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This week's class

- Basic tools
- Prep for planting
- Plan for water
- Transplanting
- Maintenance
- Wrap-up



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Review of Last Week's Class



- Last week's class
- Questions related to last week's class
- How are your seedlings?
- Review of last week's homework
- Have you been adding plants to your garden diagram?





Review of last week's class

- Last week
 - Ten popular plants
 - Shopping for plants
 - Growing plants from seeds
 - Plant pests, diseases & weeds



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Review of Last week's Class



- Questions related to last week's class



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Review of Last week's Class



- How are your seedlings?



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Review of Last Week's Class



- Review of last week's homework



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Review of IPM “Scavenger Hunt”

1. A plant that aphids eat

According to the IPM site, “Almost every plant has one or more aphid species that occasionally feed on it.”

2. A natural insect enemy of aphids

Parasitic wasps are one natural enemy of aphids.

3. A technique to control snails & slugs in the garden

One technique is to remove their favorite hiding places from the garden, like removing old boards, and ivy, for example.

4. A type of lady beetle

(Note: We commonly call these ‘lady bugs’, but you will get better search results using the more scientific name ‘lady beetle’)

One type is the Seven-spotted Lady Beetle which has seven spots. Another one is the California Lady Beetle, which has no spots.



5. One way that bermudagrass spreads

(Note: Spelling bermudagrass as a single word gives best results on the UC IPM site.)

One way bermudagrass spreads is by underground shoots, called *rhizomes*.

6. A perennial weed

Yellow nutsedge is one example of a perennial weed.

7. An annual weed

California burclover is an example of an annual weed.

8. A sign of gophers in a garden

(Note: Our common gophers are also known as pocket gophers.)

One sign of gophers is a crescent-shaped mound of dirt, usually with a plug, that they leave when digging tunnels.

9. A plant that can get sunburned

A lot of plants can get sunburned. Avocados can get sunburned, so can tomatoes, and basil.

10. A common pest or disease of roses

Black Spot is a common fungal disease of roses.



Review of Last Week's Class



- Have you been adding plants to your garden diagram?



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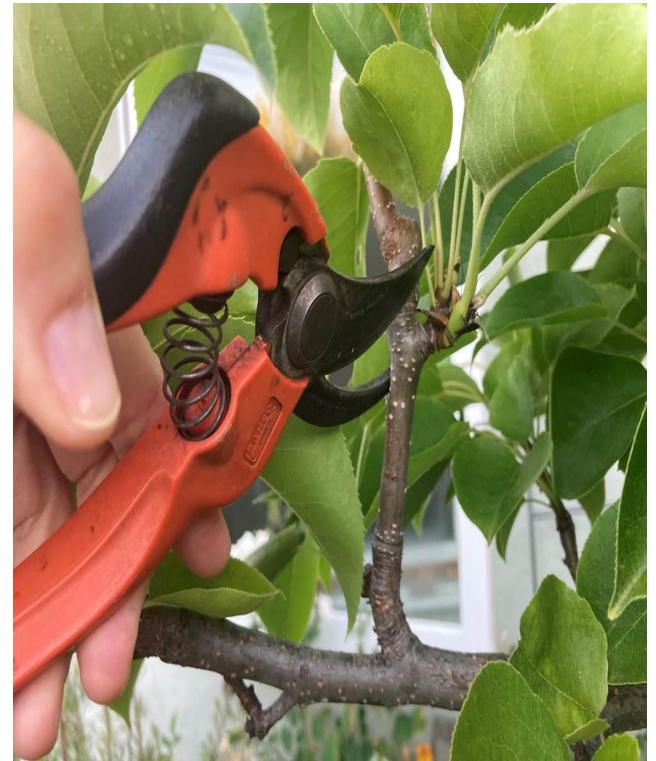
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Basic tools

- Shovel or spade
- Small digger (trowel, hori hori)
- Hose & nozzle
- Pruners and saws
- Container (big bucket, tub, rolling trash bin, wheelbarrow, garden cart)
- Gloves (many kinds) & hat (sun protection)



Pruners



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Hand Trowel, Hori Hori, Loppers, Tree Pruner/Saw



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Hula Hoe, Shovel, Bow Rake, Compost Bin, Spading Fork



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Rakes and Compost Aerator



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Before you even buy plants: Planning comes first

- Map the area or bed to be planted
- Understand its sun, shade, space, soil
- Use “Right Plant, Right Place” to select plants
- Decide how you will provide water - even drought tolerant plants need water for the first couple of years



Eliminate weeds



Photo by Candace Simpson

Overwhelmed by weeds!



Photo by Carolyn Kameya

Sheet mulch eliminates weeds or lawn



Photo by Isabelle Cnudde

Sheet mulch eliminates weeds or lawn



Photo by Isabelle Cnudde

Get the soil moisture right before digging



Only amend if needed

- Plant trees and shrubs un-amended soil
- Plant native plants in un-amended soil
- Plant most annual flowers, veggies, berries, some herbs, and some non-native shrubs (ferns, azaleas, roses...) in well-amended soil.

Amendment

- Mixed into the soil
- Improve sandy soil by holding water and nutrients
- Improve clay soils by creating larger spaces for air and drainage
- **Food for soil life**

Mulch

- Placed on top of soil
- Reduce water evaporation and runoff
- Prevent weeds
- Keep soil cooler or warmer
- **Food for soil life**

Adding soil amendment



Photo from University of Minnesota Extension

Plan for water



Hand watering

Drip irrigation



Overhead Sprinklers

Hand Watering



Advantages:

- It allows for very precise placement of water;
- Lets you check in on your plants;
- Hose is tool for pests like aphids & powdery mildew;
- It is darn affordable;
- OK to water most times of the day.

Disadvantages:

- You **HAVE** to be diligent and disciplined since you can't put a hose on a timer.
- Don't plan multi day summer vacations



Overhead Sprinklers



Advantages:

- Even, gentle coverage across a large area;
- Washes leaves;
- Low effort to set up;
- Provides water for birds and insects.

Disadvantages:

- Much water lost to wind and/or evaporation;
- Wastes water on areas that don't need it (concrete & weeds) ;
- Tall plants can block water;
- Wet foliage can encourage disease.



Drip Irrigation



Advantages:

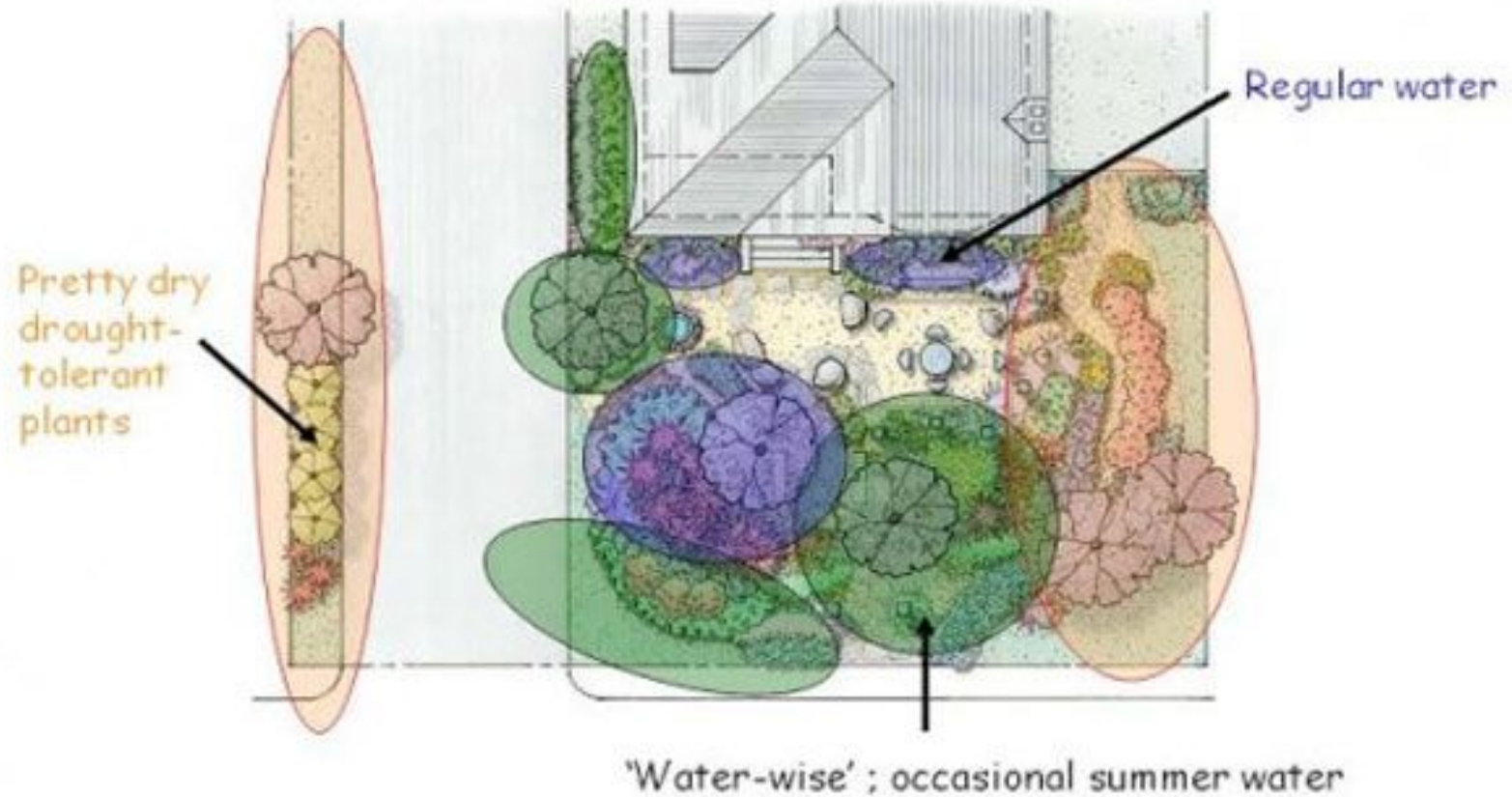
- Water is placed accurately and efficiently in root zone;
- Slow rate reduced runoff potential;
- Plant foliage stays dry;
- If controller is used, takes less management.

Disadvantages:

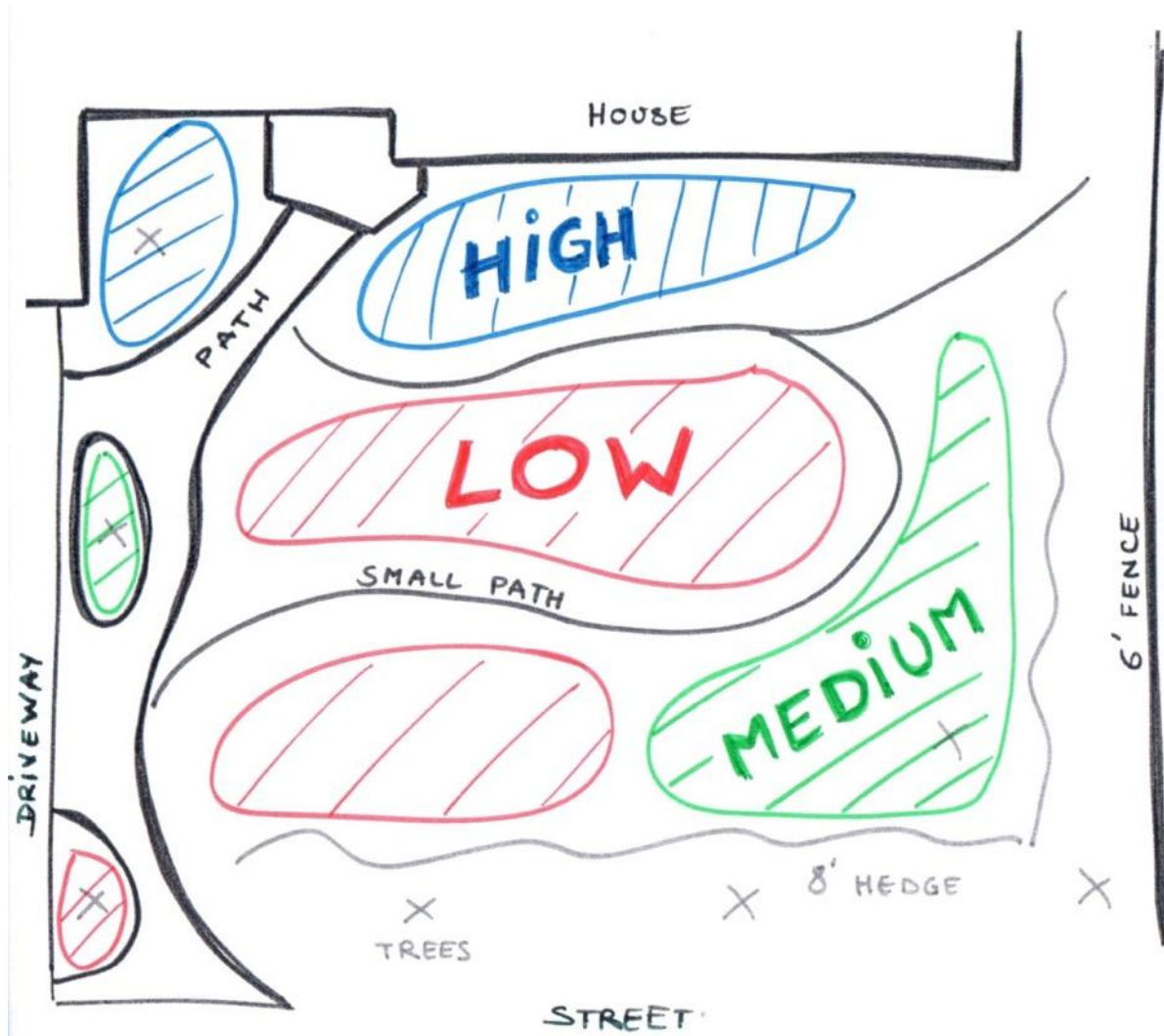
- Cost of equipment and installation;
- Parts such as emitters need to be inspected regularly.



Where: By Hydrozone



Hydrozone Example



Keys to transplanting success

Right plant, right place

Cool weather, or evening if hot

Irrigation/drippers installed*

Receiving soil is ready: moist, amended

Plant is ready: root ball thoroughly watered

Firm contact between roots and soil

Watered thoroughly after

Irrigation/drippers on root ball*

Plant support installed*

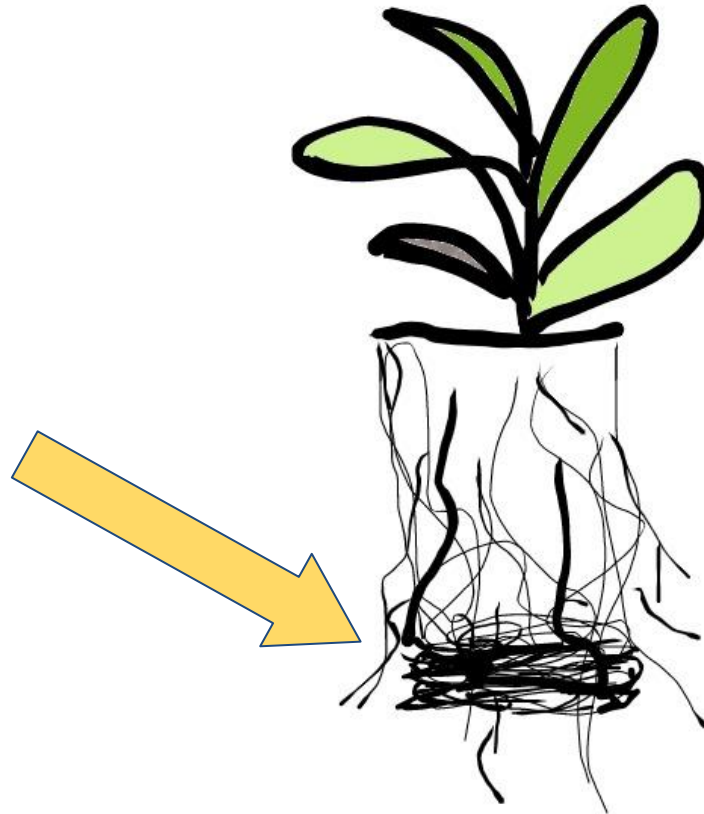
* If that's part of the plan

Transplanting or potting up a seedling

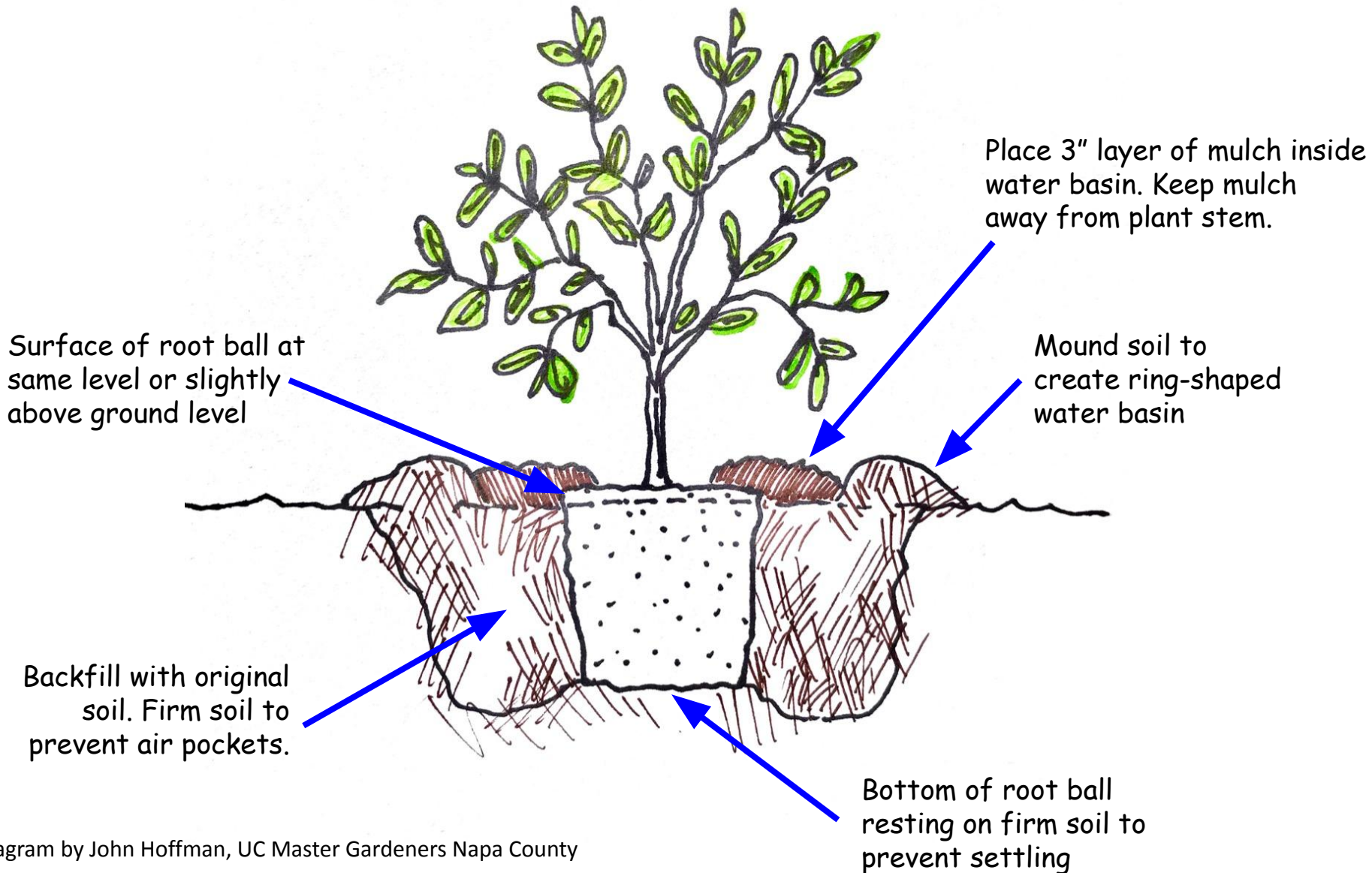


Transplanting from small pots

You can tear off the mat of roots at the bottom. New roots will form.



Transplanting perennials and shrubs



Transplanting small trees

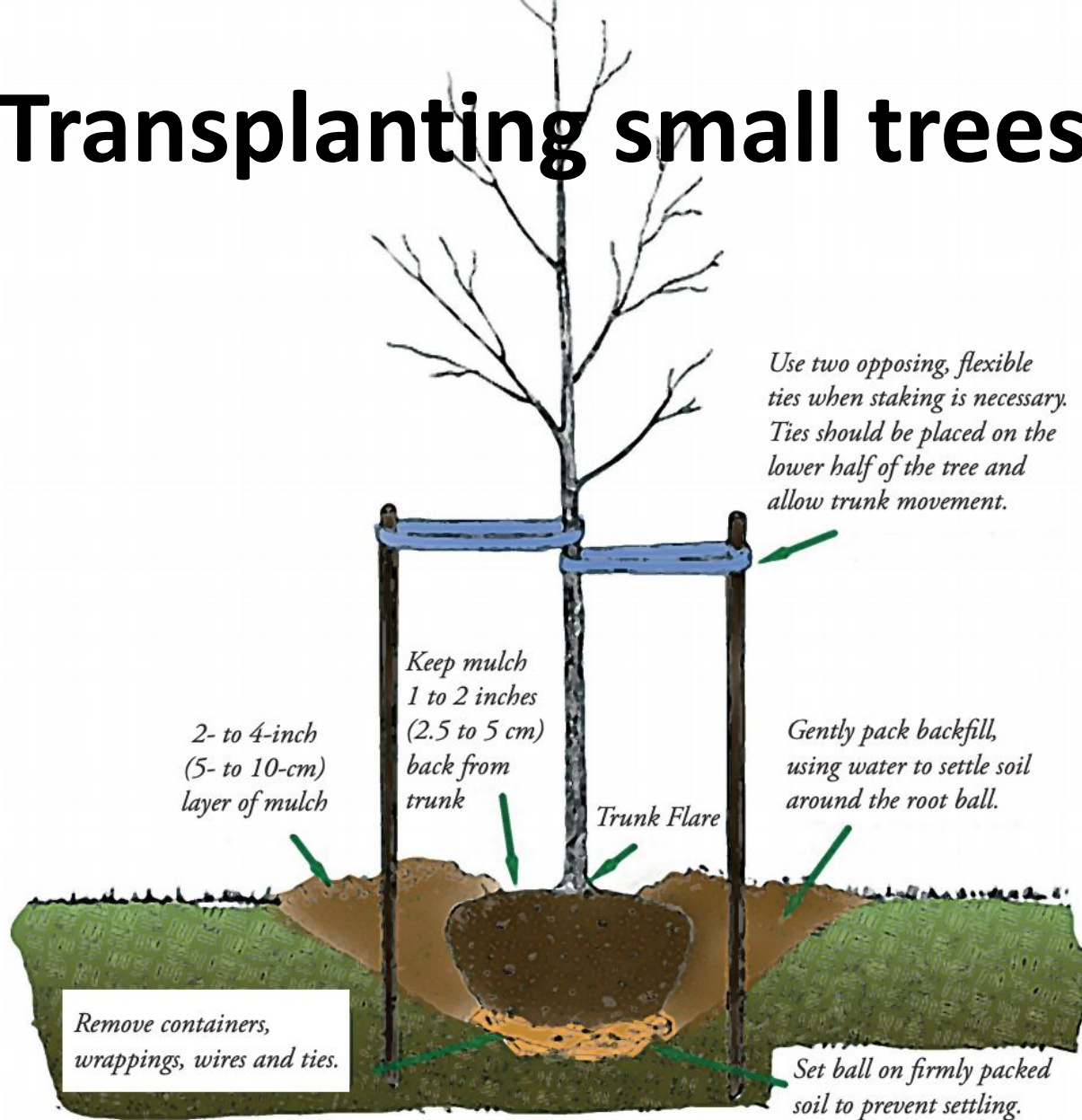


Diagram courtesy of the International Society of Arboriculture

Direct seeding in the ground

- Great for radishes, carrots, peas, beans, squash, cucumbers, corn, carrots, basil, cilantro, zinnias, sweet peas, marigolds, ??? and more!
- Seeds germinate fastest and best when soil temperature is above 70.
- Follow seed packet instructions for depth and spacing.
- Water well after planting and **keep moist**.
- **Thin** to correct spacing when about 1" tall.



Care for and protect tiny seedlings!



Susan

Observe your garden



Photo by John CC BY-NC

What you might see



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Weeding



Watering



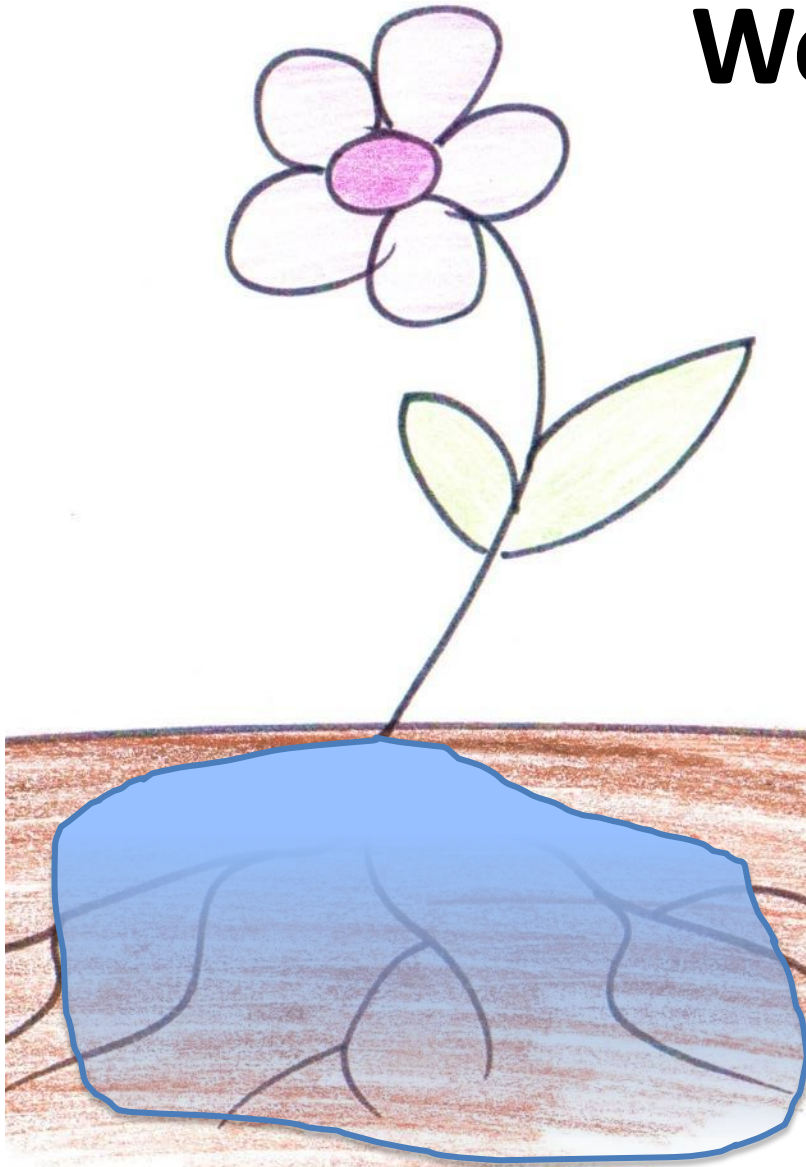
Hand watering

Drip irrigation



Overhead Sprinklers

Wet the root zone




- Use a slow gentle flow from hose, or
- Use drippers placed near the base of the plant.
- Watering is not done if the root zone is not wetted.

Check water penetration

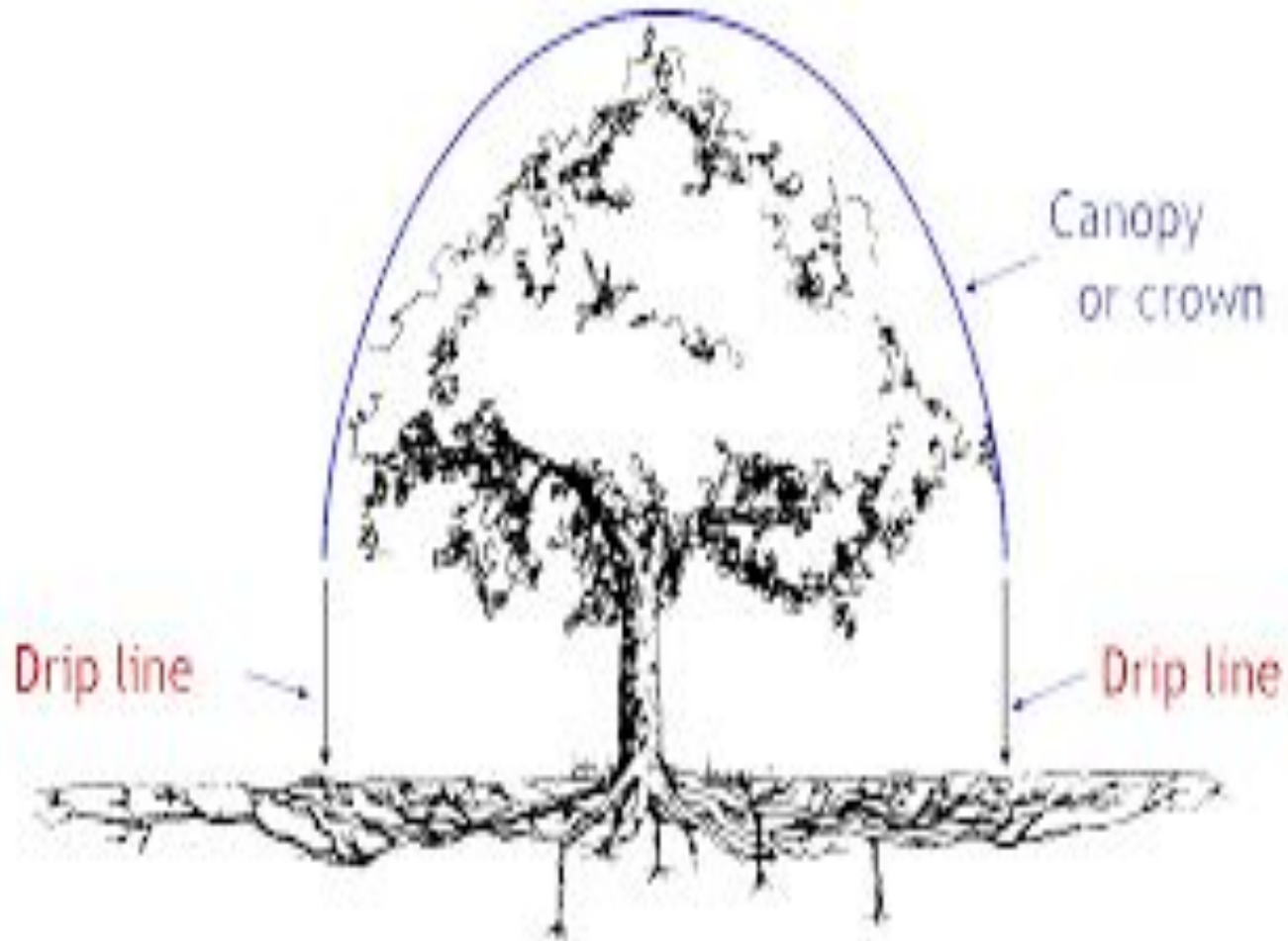


Watering rule of thumb for beginners

- 
- Water deeply to wet the whole root zone.
 - Don't water again until soil is dry 1" down.
 - Check dryness by digging and looking.

Don't forget to water again when needed. Even drought-tolerant plants need water during their first summer in the ground.

Water at the drip line



Water in early morning



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Deadheading



Photo by Texas Master Gardeners,
Texas A&M Agrilife Extension

Harvesting

Keep up with harvesting edibles to get the most from your work!



Photo by Andy Heath CC BY-NC 2.0



Photo by Michael Ward



Photo by Winston Wong CC BY-NC-SA 2.0

Pruning and cutting back

- Depends on plant type and growth habit
- Read-up on specific plant to learn how it should be pruned or cut back
- Get hands-on help from a knowledgeable gardener friend
- Attend a Master Gardener class or talk about pruning

Mulching



Photo by Agi-Kehoe

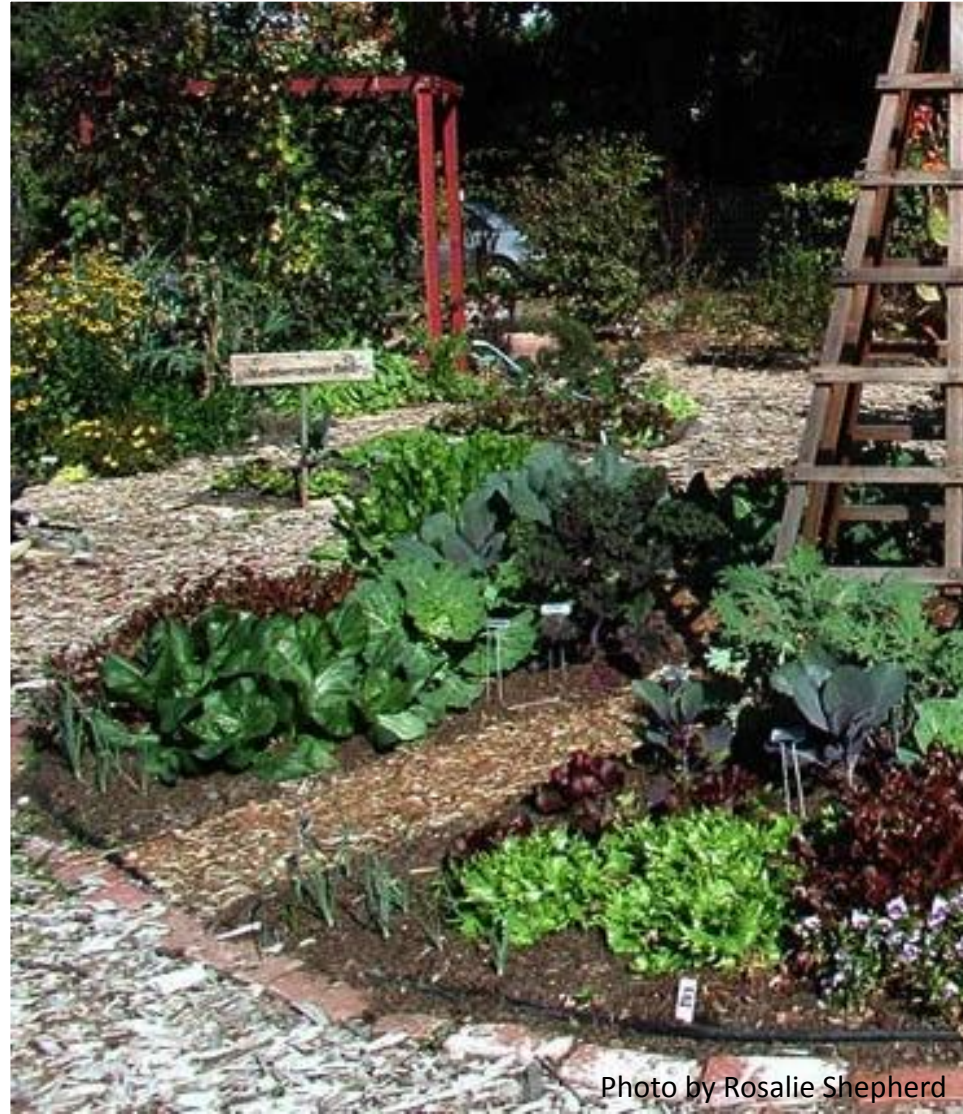


Photo by Rosalie Shepherd

Happy Gardening!



Photo by Agi Kehoe

Time for questions

Thank you for coming



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University of California Cooperative Extension (UCCE) Master Gardener Program of Santa Clara County

- University of California trained volunteers
- Help Desk: Call or e-mail
- Website: mgsantaclara.ucanr.edu
- Monthly e-mail with gardening tips & news
- Demonstration & research gardens
- Events: Spring Garden Market, others
- Classes and talks, speakers bureau, school garden advisory team



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Time for Questions!

Please fill out the class surveys

Gardening for Beginners

4 week course

- Week 1: Basic plant needs
 - Sun, Soil, Water, Climate, Space
 - Draw a site plan
- Week 2: Researching plants
 - Plant parts, Plant types
 - Make a plant list
- Week 3: Choosing plants
 - How to choose plants; pests and diseases
 - Scavenger hunt on UC IPM
- Week 4: Working in the garden
 - Soil prep, planting, maintenance

