

ARIZONA ROSE CARE CALENDAR

This calendar should be used as a guide only.

JANUARY

Prune roses back approximately one-half (waist high), except for climbers. Remove foliage. Deep water roses at least once a week. Plant new bare-root roses. Newly planted roses should be kept moist but not wet. Weed beds.

FEBRUARY

Finish pruning roses. After you finish pruning apply two-three inches of mulch. Water roses every week. Keep weeds under control. You can apply preem granules to help control weeds. Fertilize roses with a dry slow-release fertilizer.

MARCH

Increase watering as roses start growing and temperatures rise. Established container roses can be planted now. In late March, start fertilizing with a water-soluble fertilizer. Add two – three inches of mulch. Spray or pull weeds, if necessary.

APRIL

Water roses three times a week. Use a water-soluble fertilizer. Start hosing off the roses at least once a week. Watch for Spider Mites, if infested wash thoroughly every 3 days for 2 weeks. Start deadheading. Spray or pull weeds.

MAY

Water roses deeply. Wash off weekly. Watch for spider mites. Check watering systems. Deadhead the roses. Spray or pull weeds when needed. Middle of May, fertilize with a dry slow release fertilizer, Apply at half strength.

JUNE

Water roses deeply every 2 days, every day with temperatures over 110 F. Apply preem granules this month to help with weeds. Continue washing down roses. Continue deadheading. Watch for spider mites.

JULY

Continue deadheading. Spray or pull weeds. The flower blooms will be very small, this is normal. Water roses deeply every 2 days, every day with temperatures over 110 F.

AUGUST

Continue deadheading. Water roses deeply every 2 days, every day with temperatures over 110 F. Spray weeds.

SEPTEMBER

Continue to water roses deeply. Continue deadheading. Mid September. Start fall pruning. Fertilize with a dry slow-release fertilizer. Return to full strength. Prune roses back about one-quarter. Spray or pull weeds.

OCTOBER

Reduce watering as temperatures cool. Continue fall pruning. Plant potted roses. Check out the web sites and local Nurseries for new roses.

NOVEMBER

You can cut back on watering as temperatures cool. Deadhead roses. Spray weeds.

DECEMBER

Start winter pruning in late December Reduce watering. Clean and sharpen pruning and planting tools.

Water – Must have automated watering system. Roses dehydrate as quickly as we do in the summer and the low humidity often means moisture evaporates faster from the leaves than the plant can draw it up. Roses like deep watering (18”) so a drip system that runs for a few hours is ideal. If flood irrigation is used make sure it does not dry out between flooding. If roses are over-watered and the beds get water logged the rose will suffocate and drown! We assume the roses were planted in deep wide holes (24” x 24”).

This is **ONLY** a guide. Measuring water depth is the correct method.

Rose Watering Guideline	Drip line Diameter (in)	Full Sun (G)	PM Sun (G)	AM Sun (G)
Large HT & Climbers	48	12	7.2	6
Medium HT & Large FI	36	8	4.8	4
Medium FI & Large Mini	24	4	2.4	2
Small	12	1	0.6	0.5
Max Daily Temp	< 90F	90 - 100F	100 - 110F	> 110F
Water every __ days	4	3	2	1

Deep water (double quantity) once a month to wash the salts that will build up down below the root system. Water penetration can be helped by adding soil sulfur (Dispersol) to open up the pores of our clay soil.

Washing the roses off every week or two with a good hard spray from a water wand will keep off the bugs and increase the humidity around the bush. Spray both the underside of the leaves as well as the top. Time of day is not important, it is more comfortable when the sun is low!

Summer Problems

Spider Mites – lower leaves turn brown & drop off, webbing on leaves. Shake leaves over white paper – spider mites look like red pepper – moving! Wash bushes thoroughly every 3 days for two weeks with a VERY strong water spray from under the leaves.

Sun Burn – Canes turn black on top side. Loss of leaves. Cover plant with shade cloth. Wrap exposed canes.

Dropping Leaves – Check for Spider mites. Bush being stressed due to lack of water. Over watering & drowning.

Brown edges to blooms – Caused by Thrips – Shake leaves over white paper – Thrips look like black pepper. Need to spray Buds (blooms) with Merit when they are forming – size of a pea! Use worm castings.

Small Flowers – Normal for the summer due to the fast development of the blooms.

Flowers with Green centers – Vegetative growth caused by over fertilizing.

Brown edges on leaves – Caused by over fertilizing and not enough water.

Pale leaves with darker green vanes – Iron deficiency. Either lack of iron in soil or the PH of soil is too high to allow Iron to be absorbed. Treat with Ironite and / or Dispersol (soil sulfur).

White Fly, Green Fly, Mildew – Seldom a problem in the summer. Apply a systemic insecticide (spray or feed) and / or fungicide in September. Use worm castings.

Wood Borers – Holes in the end of canes. Not a major problem. Treat end of big canes after pruning with Elmer’s wood glue (not water soluble).

Cutter Bees – Circles cut out of leaves. Only cosmetic damage. Bee uses the leaf to build a nest, it does not digest leaf so insecticides do not work.

Lacewings – GOOD bugs – they eat spider mites, ¼” long green, fly up when bush disturbed.

Mosaic – Light mottle on leaves, cosmetic – Virus spread through root stock. Replace bush.

Worm Castings – Organic treatment for insects. Contain Chitinase an enzyme that will dissolve chitin exoskeleton. (AZ Worm Farm).

Mesa East Valley Rose Society – meet every 2nd Thursday at Mesa Community College, Library, 7:00pm – ALL WELCOME.

<http://www.roses4az-mevrs.org/>

<http://www.ars.org>

Face Book – Arizona Rose Gardeners

Master Consulting Rosarian: Steve Sheard, tel: 480-831-2609. Mailto: stevezroses@yahoo.com

Budding Roses
Steve Sheard
Master Consulting Rosarian MEVRS

The Budding and/or Grafting of roses is something every rose enthusiast should try. As with everything new that we learn, to do it well takes practice and a lot of patience. It is this practice that provides both excitement and frustration as some buds take and some do not. In this article I share what works for me and some of the nuances I have learned.

I am not going to try and re-write the book on the technique, there are many good resources available. An internet search on “budding” provides many sites describing the technique. Below are a few. Texas A & M has a great link to budding on citrus, similar to budding on roses.

<http://aggie-horticulture.tamu.edu/citrus/budding/budding.htm>

<http://aggie-horticulture.tamu.edu/propagation/budding/budding.html>

When to Bud: Anytime – Yes, you need lots of practice so there is no excuse “because it is the wrong time”. Granted there are better times than others to get the best results, Rose growers bud in early spring. I budded every Saturday morning for 6 months! Now I bud October to April.

What to Bud: Anything – Yes, you need lots of practice. – I think you get my message. You are learning a technique and so you can practice on any plant in your garden. You are practicing cutting the T-Cut, cutting the bud, inserting the bud and wrapping it. I have created cocktail rose bushes, just to get the practice!

Selecting Parent: This is the branch that you will bud onto. Select a bush with fewer prickles; they are easier to work with. I like Kolner Karneval (Blue Girl) as it has good, long, strong, stems with very few, if any, prickles. A good thickness for beginners is ½” to ¾” diameter – the thickness of your index finger. Select this year’s growth, as it still has a green bark and is not too tough.

I was fortunate to get my own Dr. Huey bush – a neighbor asked me to look at a bush as it seemed terribly wild. Sure enough the Dr. Huey root-stock had taken over and the original bush had died. I moved it to my yard and planted it in a back corner where the site of 20 tags hanging from it would not be unsightly!

Selecting Bud-wood: You want to select a dormant bud on this year’s growth for best results. A good thickness for cutting buds off is 3/8” to ½” diameter, the size of your little finger. (Smaller than a pencil is hard to work with). The bark that is still soft is good. If the leaf is still attached – that is very good, it creates a handle (I will explain later).

Clean is Beautiful: It is very important to keep the inside parts of the plant that will “bond” CLEAN. This includes NO human body oils. That is right; we do not touch the parts of the plant that are going to do the “bonding”. This is why you need a “handle” to work with the bud. When the bud drops on the floor, hope that it lands where the inside is not down, pick it up by the handle.

Knife: VERY sharp and easy to use, is more important than the type of knife. I like the utility knives that have the ¼” retractable blades that you break off when they get dull. I have never been good at sharpening to “razor sharpness”. Keep the blade clean.

Sealer / Tape: I have tried everything from masking tape to rubber bands, from grafting gook to green garden tape. What I like best is the ½” Parafilm Grafting Tape available from Amazon. It is not expensive and it works great. Some Rosarians prefer the 1” wide. The rose growers use the 1” wide.

Where to bud: For practice – anywhere that is easy to get to. Select an area just below (1”) an existing bud on the root-stock. Clean it well with a dry cloth.

Making the “T” cut: Cut the bark only through to the wood, first cut across – about ½”; second cut from the center of the cross cut down about 1”. Put the point of the knife under the corners at the junction of the cuts, and gently lift the bark. In the spring it will peel easily!

Cutting the Bud: Select a nice plump bud, preferably one that has begun to swell but has not yet broken. Clean off the bark around the bud with a cloth. Trim the leaf stalk to about 1”; this will be your handle. Start the cut 1/8” to ¼” below the bud and slice gently up to about 1” to 1 ½” above the bud. The “extension” above the bud will provide a “handle” if the leaf stalk breaks off. The thickness of the wood below the bud should be about 1/32”, and it should be about ¼” wide.

Placing the Bud: Without touching the underside of the bud, slide it into your T cut so the bud is about ¼” below the cross cut. Cut the handle off at the cross cut. Hold closed the T cut over the bud and gently break off the leaf stalk.

Taping the Bud: With a 6” to 9” piece of Parafilm Grafting Tape begin wrapping from the bottom. Gently stretch the tape as you wrap, overlapping the previous turn. Work you way up, completely covering the bud eye, to above the cross cut. One layer of tape is sufficient if you have it good and tight. The Parafilm Grafting Tape is designed to self amalgamate when stretched so it forms a completely sealed cover.

Label: Label with the budded flower’s name and the date.

Success? Wait 4 to 6 weeks and then gently slit the Parafilm Grafting Tape on the reverse side to the bud and remove it. If the bud is still green you were successful and it is ready to force. If it is black, you need more practice, return to step 1! (The Parafilm Grafting Tape will turn brittle and break in the sun after about 10 weeks).

Forcing the Bud: To force the bud cut off most, but not all, of the growth above the bud. You need to leave some leaves on to feed the roots. When the bud has broken and you have new leaves, cut the remaining of the old parent bush away. (If buds from the root-stock are growing, these need to be trimmed off with a sharp knife). **Congratulations, you have your own rose bush.**

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<http://www.ars.org>

<http://www.ag.arizona.edu>

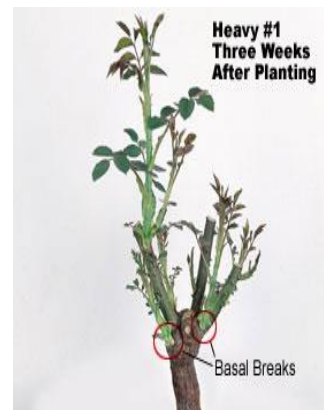
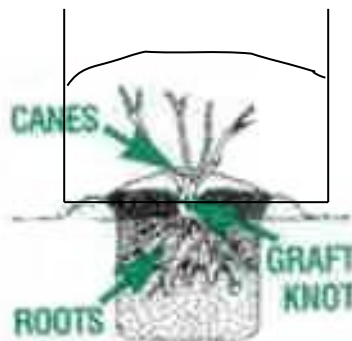
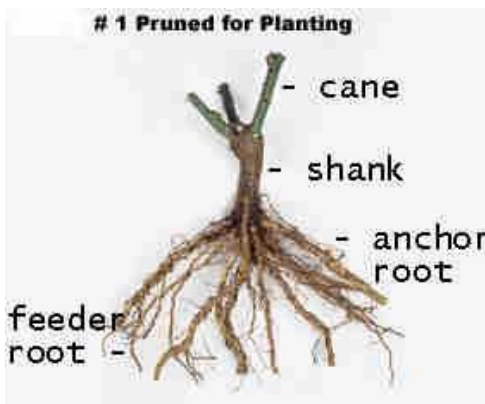
<http://www.ag.arizona.edu/maricopa/garden/>

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Planting Bare-Root Roses

December – February

1. Select your Rose Bed. Roses like a minimum of 6 hours sun per day. Full sun is OK. Plan your rose bed with about 18 inches to 2 feet spacing between bushes. All bushes need to be accessible, even after they are fully-grown. Grandiflora or large Hybrid Tea at back, medium Hybrid Tea or Floribunda at front. Miniatures in very front.
2. Unwrap Bare-root rose bush carefully and rinse off packing material.
3. Mix 3 Tablespoons of B-1 in 3 Gal of water. Emerse rose bush completely covering all roots. (Complete bush is OK). Soak for a minimum of 2 hours. 24 hours is better. No more than 3 days.
4. Dig holes – 18-24 inches round and 18-24 inches deep. The **HARDER** the soil the **BIGGER** the hole!
5. Drainage test. Completely fill hole with water. Let drain completely. Fill again with water; it should empty at > 1 inch per 1 hour.
6. In bottom of hole place 1 cup of gypsum or Soil sulfur, mix into soil.
7. In a clump at the bottom put 1 cup of Triple Super Phosphate (0, 45, 0).
8. Soil mixture: 50% native soil, 50% mulch/aged compost. 1 cup Milorganite.
9. Place mix into hole to form a cone with top level with the top of the bed. Sprinkle the mound with bone meal.
10. Remove rose bush from B-1 solution. Prune out dead roots and stems. Prune top off all branches. Spread the roots out over the mound. The graft needs to be above ground level when the soil settles.
11. Cover the roots with soil mix and pat down firm – **DO NOT STOMP DOWN**. Roots need Oxygen.
12. Make a well around the bush and pour in B-1 mix. The water will pull the soil down.
13. Cut hole in bottom of paper bag and slide over bush. Fill bag with mulch, minimum 8 inches. Slowly pours 1 gallon of water over mulch. Water with 1 quart of water every 3rd day until growth is at least 6 inches. (Should start within 6 weeks).
14. When the plant is growing well cut the bag off and let the mulch collapse over a few weeks. Mulch the complete bed 4 inches deep in April.
15. Fertilize **ONLY** after first bloom. First year - Cut flowers with **NO** stems, leave every leaf on the bush.



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Propagating Cuttings

For best results use a stem that has recently bloomed.

About the thickness of a pencil

About 9 inches long

Label the cutting



Cut $\frac{1}{4}$ inch above top leaflet
Trim leaflets to just two leaves

Remove lower leaflets and
prickles (thorns)



Propagating Cuttings cont.



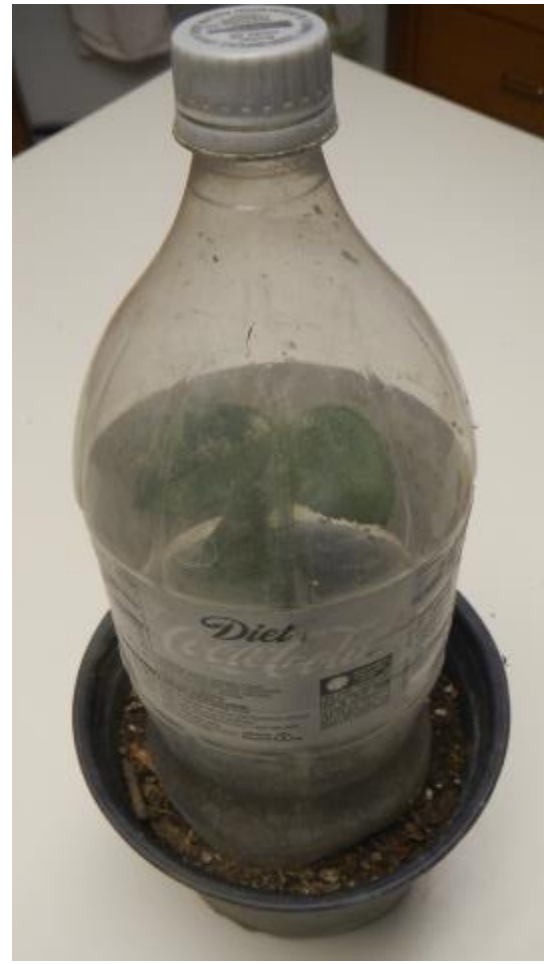
Remove skin / bark
in 3 small places
for $\frac{3}{4}$ inch

Dust with rooting
powder containing
Indole-3-Butyric
Acid



Plant in a light mix about 3
inches deep, keep moist

Make a mini-green house
using a soda pop bottle or
plastic bag



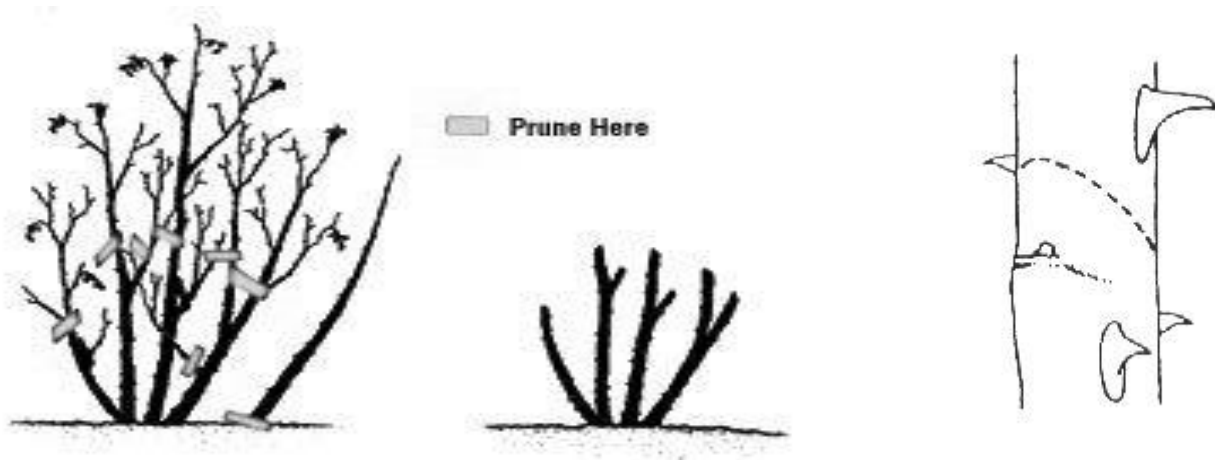
Cutting Care

- Seal the bag around the pot with an elastic band.
- Keep soil damp - water once a week by soaking overnight in a casserole dish.
- Place in full shade - north side of the house, open to the sky is good as the light is bright.
- Look at the cuttings in 4 weeks by removing the bag. If they are black - sorry, they are dead. Place bag back on.
- When the bag is full of leaves, take the bag off for a little each day for a week.
- Place the new roses in morning sun ONLY, water twice a week.
- If you have two or more STRONG plants in one pot, tip them out and under a running hose separate them, replant in a garden potting soil, Keep the soil wet for two weeks. Morning sun only.
- Once the plant has flowered it can be planted in the garden - minimum 6 hours sun. Start fertilizing.
- Cut only the bloom the first year.

Pruning Roses

(December to February)

1. Why do we prune? To check the health of the bush, cut out old or diseased wood, prepare it for next years growth, put it to rest.
2. Decide what height you are going to prune the bush – for maximum number of blooms (3 ft to 4 ft) for competition size blooms (2 ft). 1/3 to 1/2 of the bush. Cut off top 6 inches above the selected height.
3. Cut out all wood smaller than a pencil. The next growth is only smaller.
4. Remove all leaves. This puts the bush to sleep and lets you view the canes.
5. Select the main branches you want to keep. 8 - 12 for maximum blooms, 6 - 8 for competition size blooms. Consider the shape of the bush once it starts to grow again.
6. Leaning bush, prop it up with a stone to give it a more symmetrical shape.
7. Pruning cut. Find outside Bud-Eye; cut $\frac{1}{4}$ inch above sloping in. Anvil up.
8. Remove all crossing canes close to the main branch.
9. Remove all branches that you did not want (when selecting in 5) close to the main branch.
10. Trim the tops of the remaining canes with the pruning cut.
11. Optional to seal the end of all stems.
12. Water, Fertilize, Water again!



13. Hands On pruning class. MCC Rose Garden every Saturday in January & February, 8-12am. (Bring gloves, secateurs, closed shoes)

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Summer Rose Care

Things to do in April & May to prepare for June, July & August

Hot weather hits our roses pretty hard in June – sometimes earlier! It hits us all hard. The low humidity makes it even worse. Roses will do well if they are given a little attention and in response you will reap the rewards by having flowers all year.

Mulch – The rose beds should be given a fresh layer of mulch in April / May. It should be 2 to 4 inches thick. Forest mulch or pine needles work well. The mulch will help keep the roots cooler, retain moisture and help to prevent weeds. (For single roses a 4ft diameter circle of mulch is needed). Free source <https://getchipdrop.com/>.

Water – Must have automated watering system. Roses dehydrate as quickly as we do in the summer and the low humidity often means moisture evaporates faster from the leaves than the plant can draw it up. Roses like deep watering (18”) so a drip system that runs for a few hours is ideal. If flood irrigation is used make sure it does not dry out between flooding. If roses are over-watered and the beds get water logged the rose will suffocate and drown! We assume the roses were planted in deep wide holes (24” x 24”).

This is **ONLY** a guide. Measuring water depth is the correct method.

Rose Watering Guideline	Drip line Diameter (in)	Full Sun (G)	PM Sun (G)	AM Sun (G)
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Water every __ days	4	3	2	1

Deep water (double quantity) once a month to wash the salts that will build up down below the root system. Water penetration can be helped by adding soil sulfur (Dispersol) to open up the pores of our clay soil.

Washing the roses off every week or two with a good hard spray from a water wand will keep off the bugs and increase the humidity around the bush. Spray both the underside of the leaves as well as the top. Time of day is not important, it is more comfortable when the sun is low!

Feeding – Roses are hungry plants and like to be fed regularly. However, during the summer months they do better being on a **diet**. Due to the plants drawing up a large amount of water and the high rate of evaporation, a full meal will leave too much fertilizer in the leaves before it can be used in photosynthesis, resulting in fertilizer burn. Fertilizer should be applied at the same frequency as specified for the product – **but only half the quantity. Switch to Summer Feeding when the Temperatures go over 100F.** Water before and after feeding. Regular feeding resumes in September.

Cutting Flowers & Dead-Heading. Blooms will be about half the size due to the fast development caused by the heat. Roses are no different to any other plant. They create flowers to reproduce. If you leave the spent flowers on the bush, it will think it is done doing what it has to do and not send up any new blooms. Dead-Heading is the removing of just the spent blooms. First year plants and week plants should **ONLY** be Dead-Headed – the plant needs all the leaves

it can keep for photosynthesis and to produce shade for its stems. Flowers for the house should only be taken from mature bushes and then with short stems – again leaving leaves to help provide shade.

Pruning – Never done in the summer, a light pruning, 25% of the bush, can be done in early October to stimulate new growth for Thanksgiving & Christmas.

Summer Problems

Spider Mites – lower leaves turn brown & drop off, webbing on leaves. Shake leaves over white paper – spider mites look like red pepper – moving! Wash bushes thoroughly every 3 days for two weeks with a VERY strong water spray from under the leaves.

Sun Burn – Canes turn black on top side. Loss of leaves. Cover plant with shade cloth. Wrap exposed canes.

Dropping Leaves – Check for Spider mites. Bush being stressed due to lack of water. Over watering & drowning.

Brown edges to blooms – Caused by Thrips – Shake leaves over white paper – Thrips look like black pepper. Need to spray Buds (blooms) with Merit when they are forming – size of a pea! Use worm castings.

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Hassel Free Rose Growing in Arizona

Steve Sheard

stevezroses@yahoo.com 602-334-7483

March 2024

Hassel Free Rose Growing

- Where to Plant
- Selecting Roses
 - Types of roses
 - Picking the better plant
 - Bare Root vs Potted
- Planting
 - Bed Preparation - planting
 - Water Systems
- Fertilizing
- Watering
- Pests
- Summer Survival
- Pruning
- Resources



**My First year
here I planted
20 Roses**

18 Died

Hassel Free Rose Growing

- Where to Plant
 - Full Sun – YES
 - Roses need minimum 6 hours of sunlight per day
 - Mesa Community College - +9,000 bushes in full sun

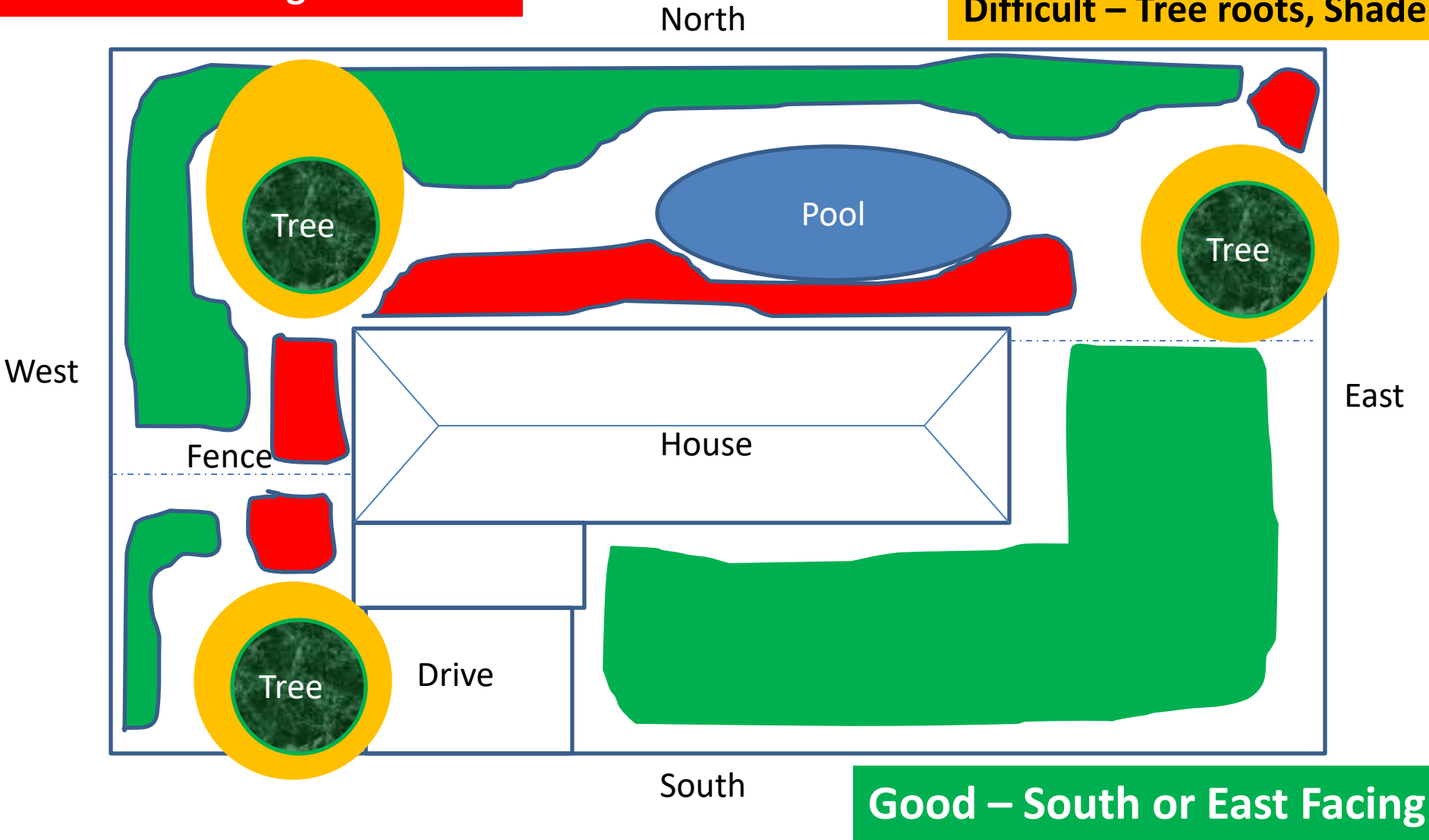
A photograph of a large rose garden. In the foreground, there is a curved, reddish-brown paved path. To the left of the path, there is a dense bed of roses in various colors, including pink, red, and yellow. A black lamp post stands in the middle ground. In the background, there are green trees and a white fence. The sky is overcast.

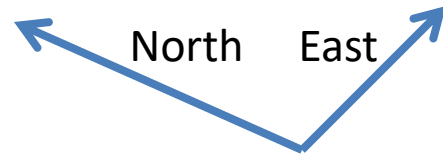
– West valley grows +60% ALL roses sold in USA

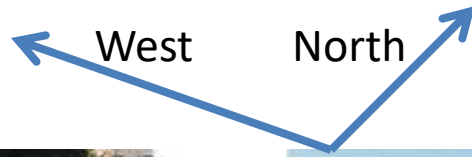
Hassel Free Rose Growing

Bad – West facing – very HOT
- North facing – little SUN

Difficult – Tree roots, Shade







Hassel Free Rose Growing

- Selecting Roses

- Types of roses – *Depends on Growth Habits*

- **Hybrid Tea** - Single Long Stems

2 Ft to 6 Ft

Grandiflora

(Mix long stems & Sprays)

- **Floribunda (Shrubs)** – Spray of smaller flowers

- **Climbing** Roses

5 Ft to 30 Ft

- **Miniature** Roses

<2 Ft

- **Mini-Flora** Roses

To big to be a Mini!

- **Old Garden Roses**

- *David Austin*

2 Ft to 10 Ft – Old Form - Fragrant

- http://www.roses4az-mevrs.org/site/Best_Roses_for_AZ.html

Selecting Roses

– Picking the better plant

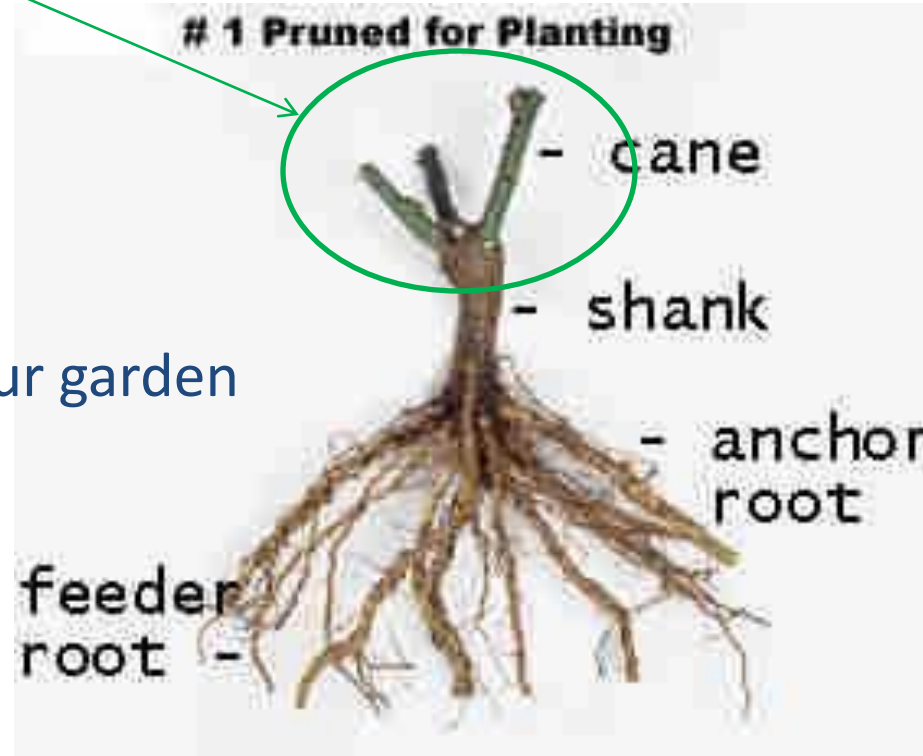
- **Strong GREEN Plump Canes**

– Bare Root

- Dormant
- Mid Dec to end January
- Greater Choice
- More time to establish in your garden

– Potted

- End January to End March
- Less Choice
- Already growing



Strong GREEN Plump Canes

Good

Bad

**Minimum
3 Good
Canes**



Before Planting – Water system

- **Install an automatic watering system**
 - *My yard has 17 valves!!!*
- Drip System
 - In Line or individual drip heads
 - Bubbler
 - Mini Sprinkler
- Flood irrigation
 - Augment with drip! Or by hand
- **DO NOT THINK YOU CAN ONLY HAND WATER**
 - Miss once and your rose is TOAST!!!

Bare Root Bed Preparation

A big hole

Check Drainage

Fill with water –
let it empty

Fill again – time to
empty?

30 min – Excellent

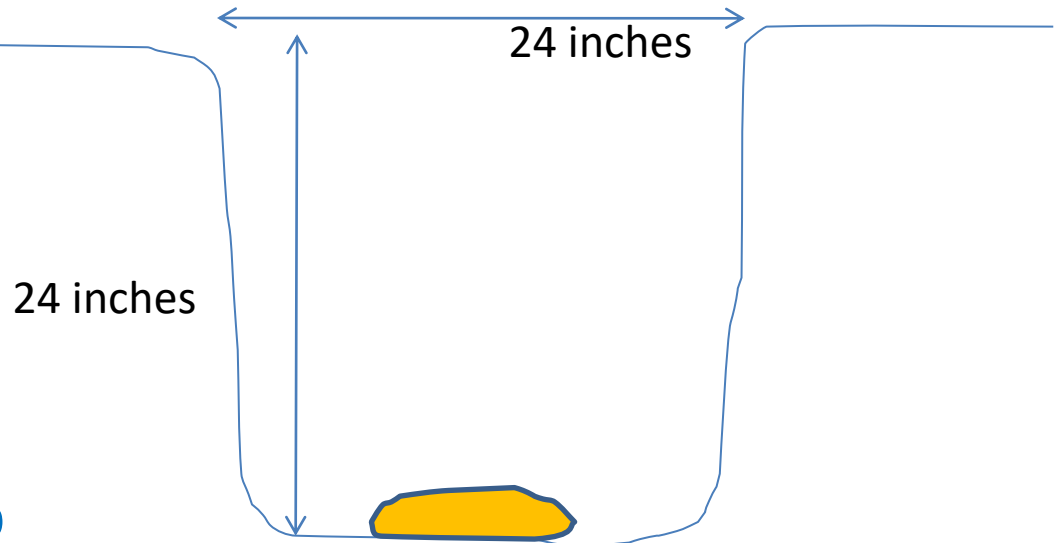
4 hours - BAD

Mix

50% natural soil

50% Mulch

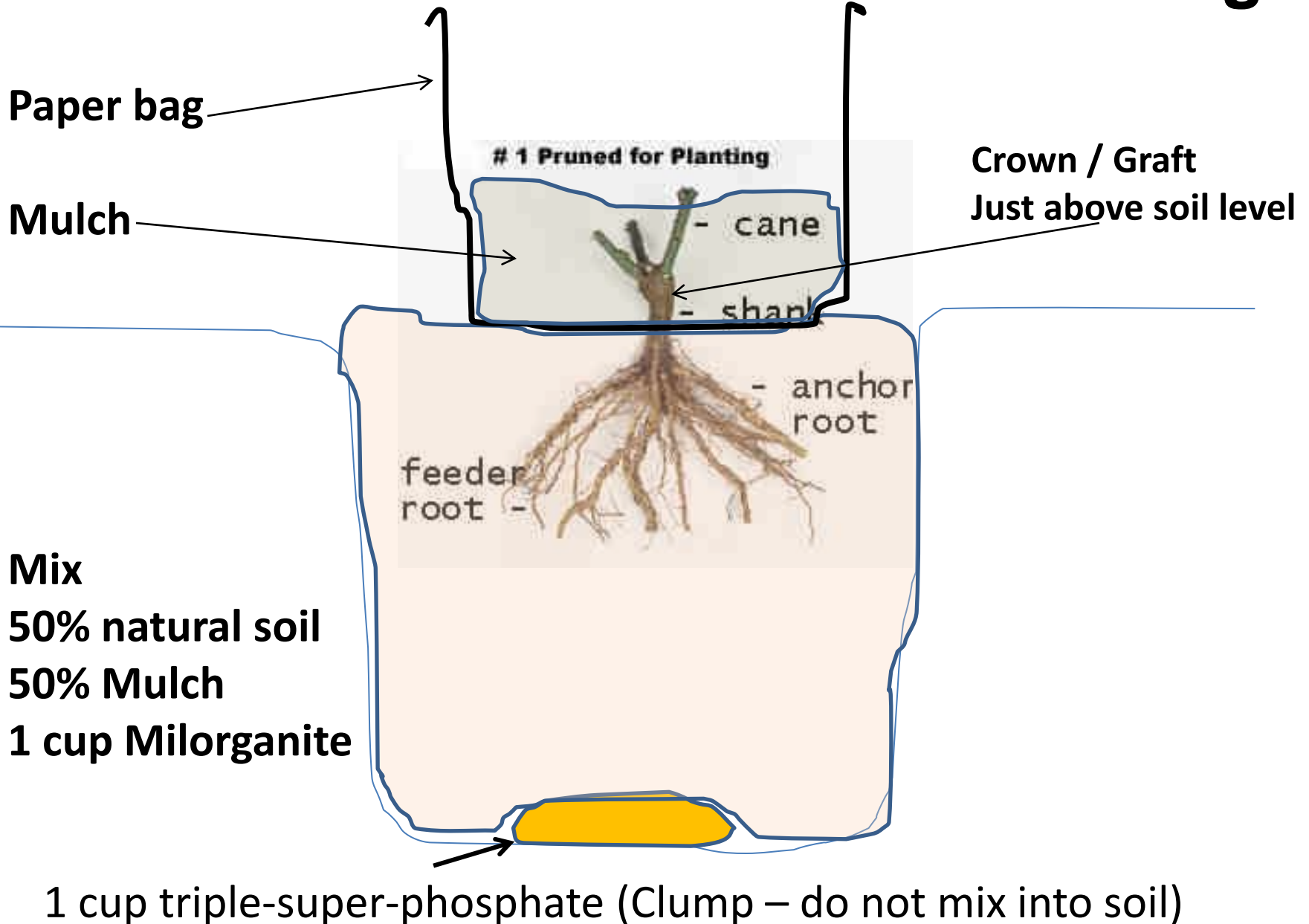
1 cup Milorganite



1 cup triple-super-phosphate
(Clump – do not mix into soil)



Planting



Potted Rose Bed Preparation

A big hole

Check Drainage

Fill with water –
let it empty

Fill again – time to
empty?

30 min – Excellent

4 hours - BAD

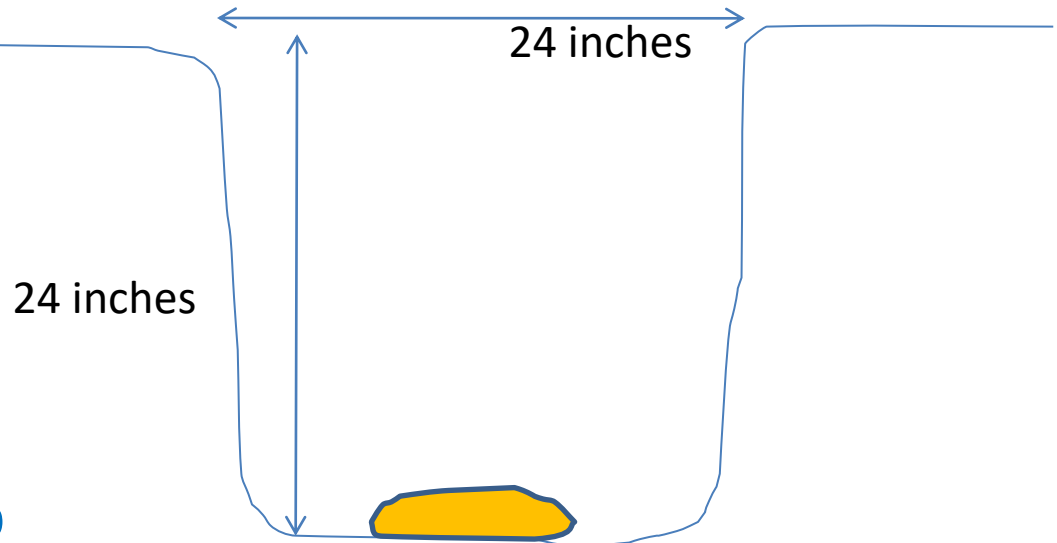
Mix

50% natural soil

50% Mulch

1 cup Milorganite

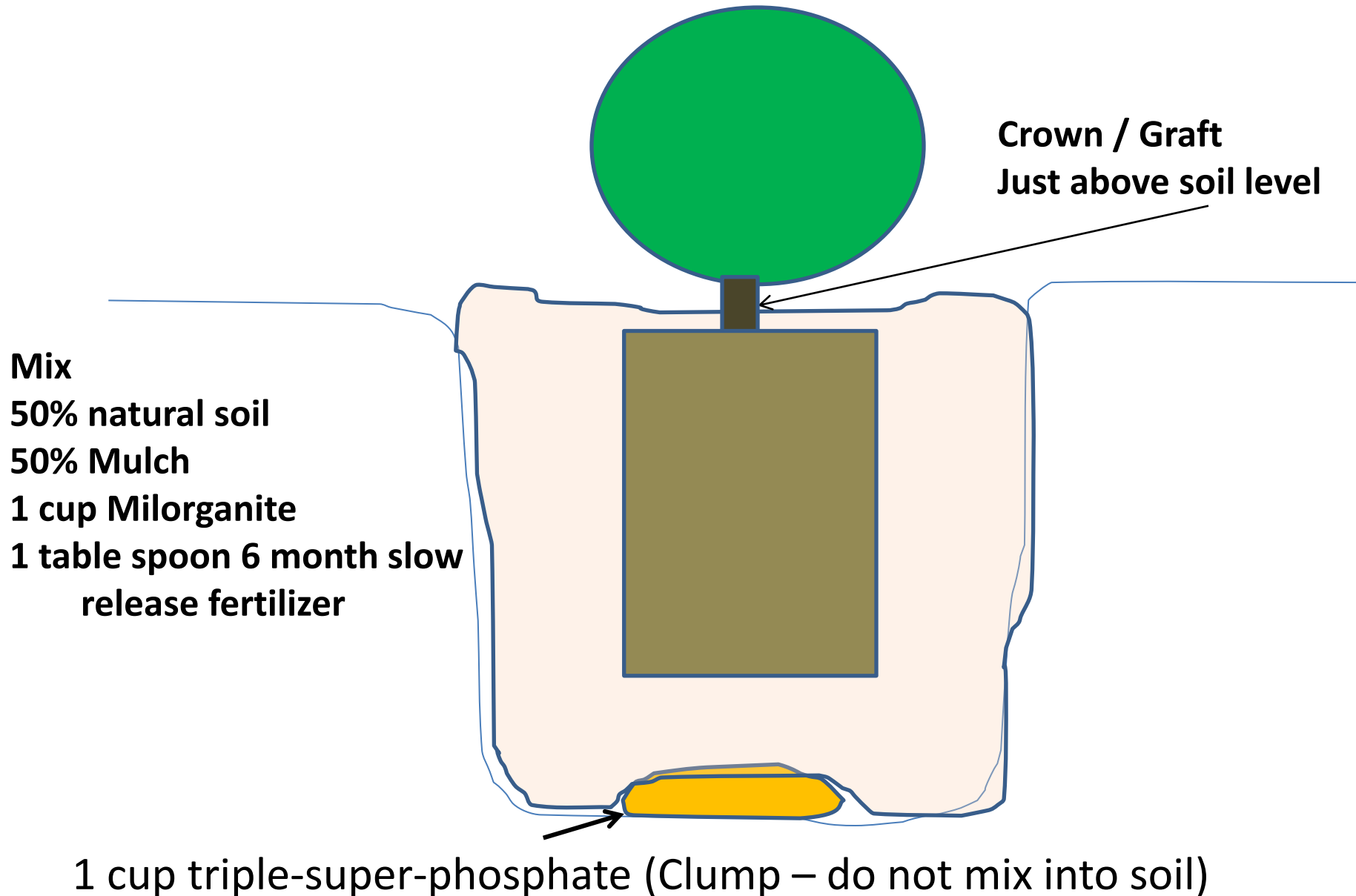
1 table spoon 6 month slow
release fertilizer



1 cup triple-super-phosphate
(Clump – do not mix into soil)

Only use for established growing roses

Planting Potted Rose



Roses in Pots



Selecting the pot

- **A double layer resin pot** is ideal, but hard to find. The double wall provides an insulating air layer to help minimize heat transfer, plus they are lightweight making them easier to move.
- **Single layer resin or plastic pots** are lightweight.
- **Clay pots** – unglazed allow for **water evaporation** out the side of the pot helping to **cool the pot**, but are heavy.
- **Glazed Clay Pots** – look nice but do not breath and are heavy.

Setting up the pot

- Good drainage is paramount, ideally you should have **3 drain holes**. Place a layer of pine cones or plastic water bottles in the bottom covered with some garden fabric.



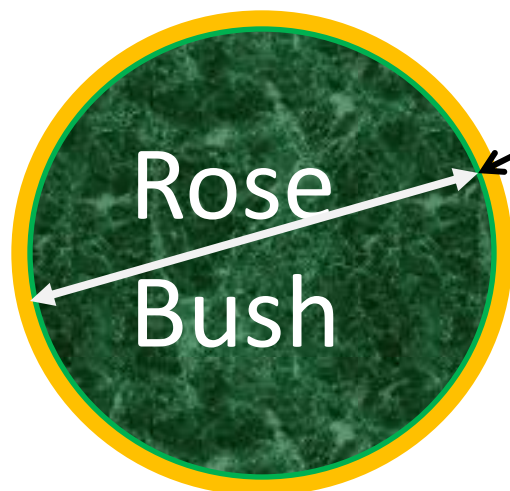
- A layer of insulation on the inside of the pot will help stabilize the temperature. Keeping the pot shaded helps.
- Place the pots close together where they can shade each other and create a micro climate.



Soil for the pot

- Soil - It needs to be light, able to hold some water, and keep the PH about neutral. 50% cactus mix, 25% mulch & 25% peat moss.
- If you use garden soil add perlite.
- Large roses – 24” diameter 24” deep or bigger
- Medium roses – 18” diameter 18” deep
- Small roses - 12” diameter 12” deep

Rose in Pots Watering Guideline	Pot Diameter (Inches)	Full Sun (Gallons)	PM Sun (Gallons)	AM Sun (Gallons)
Large HT & Climbers	36	8	6	4
Medium HT & Large FI	24	4	3	2
Medium FI & Large Mini	18	2	1.5	1
Small	12	1	0.7	0.5
Max Daily Temp	< 90F	90 - 100F	100 - 110F	> 110F
Water every __ days	3	2	1	1



Pot Diameter

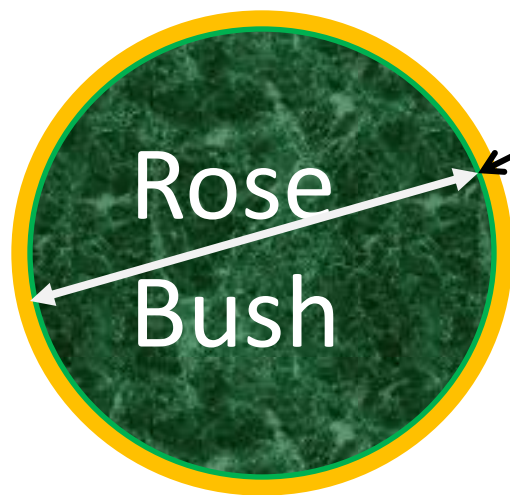
Medium HT in July 100 - 110F
gets 4 Gallons Every day

(2 x 1 Gallon per hour drippers for 2 hours)

Fertilizing

- **Do NOT feed new roses until after first bloom**
- Roses are like Teenagers – They need feeding LOTS
- **How Much? – Go by the directions**
 - + 20% for Medium Bush, + 50% Large Bush
 - Miracle Grow Hose end feeder, 10 seconds = 1 gallon
 - AZ Best Citrus Food
 - Bayer All Purpose Rose Food
 - Magnum Rose Food
 - 3 Month / 6 Month slow release good for the summer
- **– Summer - On Diet 50% (1st June to 15th September)**
 - Directions 1 cup every 6 weeks – **give ½ cup** every 6 weeks

Rose Watering Guideline (Average Soil)	Drip line Diameter (Inches)	Full Sun (Gallons)	PM Sun (Gallons)	AM Sun (Gallons)
Large HT & Climbers	48	12	7.2	6
Medium HT & Large FI	36	8	4.8	4
Medium FI & Large Mini	24	4	2.4	2
Small	12	1	0.6	0.5
Max Daily Temp	< 90F	90 - 100F	100 - 110F	> 110F
Water every __ days	4	3	2	1



Drip Line Diameter

Large Climber in June > 110F
gets 12 Gallons Every day

(6 x 1 Gallon per hour drippers for 2 hours)

Fertilizer Burn

Edge of the leaves
are brown

Water well BEFORE
and AFTER fertilizing

Worse in the
summer when the
humidity is very low



Problems / Pests

Powdery Mildew

Cool nights

Water – wash
once a week



Fungicide

Black Spot

Rare in AZ

Water

Fungicide



Rose Mosaic

Root born virus

No treatment

Some years are worse than others



#1 Pest – Spider Mite

April, May & June

September & October

WATER

Miticide



Wash Underside

Preventative

Once a week

April, May & June

September & October

Treatment

**Wash every 3 days
for 2 weeks**





#2 Pest Aphids & White Ffy

Wash off with
Water Spray
Spray infected
area with
Insecticide - Merit



Worm Castings

Beneficial Insects



Lady Bug



Lace Wing

Western Flower Thrips

Eats edge of petals starting in bud

Spray bud with Insecticide once a week

Worm Castings



How small?

1.0 mm

Looks like pepper moving on your white kitchen counter

Worm Castings

Organic Pest Repellant



March 15, 2014

Applied Worm Castings



Worm Castings

1 week later



How much to apply?

I applied one shovel full per bush.

(Still researching and experimenting.)

- Worm castings test very high for chitinase producing organisms.
- Chitinase is an enzyme that will dissolve chitin.
- The exoskeleton of bugs is made of chitin.
- Bugs detect the level of chitinase in plants.
- Once the chitinase level is high, they leave.
- www.casting4growth.com Good Things to Know about Worm Castings

Chili Thrips

Chilli Thrips feed on leaves and stems.

Will decimate a plant.

Favorite feeding sites are the tender maroon-colored new growth and where leaflets attach to the stem.



Treating Chili Thrips

Cut off all parts of the plant that have evidence of damage.

Do not compost the infected plant parts

It is advisable to continue weekly treatment applications for at least 3 weeks.

(example: Spinosad-Neem-Spinosad)

Active Ingredient Registered for Chilli Thrips	Some Common Names	Notes:
Spinosad	Captain Jack's, or Monterey: Garden Insect Spray	Organic, Repeat Bi-Weekly <u>Most effective</u> line of defense.
Neem Oil	Neem Oil Concentrate 70% Neem Oil Monterey: Rose & Flower Spray Plus	Organic, Alternate with Spinosad Some formulations include Pyrethrin's as exciter. Do not spray water-stressed plants. Do not spray over 80F
Insecticidal Soaps	Many Brands. (Household Soaps are too harsh)	Organic, Caution-Overuse can strip leaf of waxy protection causing leaf burn.
Cottonseed, Clove & Garlic oils.	Bonide Mite X Monterey All Natural Mite & Insect	Organic, Activator & Antagonist Can burn. Watch out for heat/stress damage. <u>Weak on Chilli Thrips.</u>
Imidacloprid - Spray	Bayer 3-in-1 Insect, Disease & Mite BioAdvanced: Rose & Flower Care	Spray: minimum of 3 times, 7-14 days apart. <u>Weak on Chilli Thrips.</u>
Beauveria Biological Insecticide	BotaniGard (Soon avail. to homeowners) Velifer (not avail. in CA... soon we hope!)	Organic, Unique mode of action. Alternate with Spinosad & Neem when available.
Winter Oil Spray	Monterey Horticulture Oil Fertiloam Horticultural Oil	Spray: When DORMANT ONLY! Repeat 3 times 14 days apart. VERY EFFECTIVE control strategy!

Wood Borer

Good Bug / Bad Bug

Good

Wasp – Collects
White Fly,
Green Fly

Bad

Seal end with
Wood Glue



Cutter Bee

Does not ingest

Uses leaf to build nest



Basal Break – **Good** / Root Stock - **BAD**

Above
the Graft
Good

Below
the graft
Bad

Dig down
and cut
off



Root Stock – Compare leaves?

Fragrant Cloud Hybrid Tea

Dr. Huey Rootstock



1, 2, 3, 4 of Summer Survival

- 1 – Mulch, Mulch & **MULCH**
 - www.chipdrop.in / getchipdrop.com
 - 2 - Leave as much leaf as possible take only the flowers (use a small vase)
 - 3 - HALF strength feed
 - 4 - Water, water, water
-
- Shade Cloth
 - 30% of my roses were covered from Early June to end September (State Fair)



Mulch

– Mulch or compost (NOT rock)

- 6 inches deep

- Why?

- Soil temperature exposed to sun is +140

- °F, under the mulch 90 °F

- Reduces evaporation

- www.chipdrop.in / getchipdrop.com

– Living mulch, soil temp under the potato vine 85 °F



Living Mulch



Roses in Full Sun / Mulch

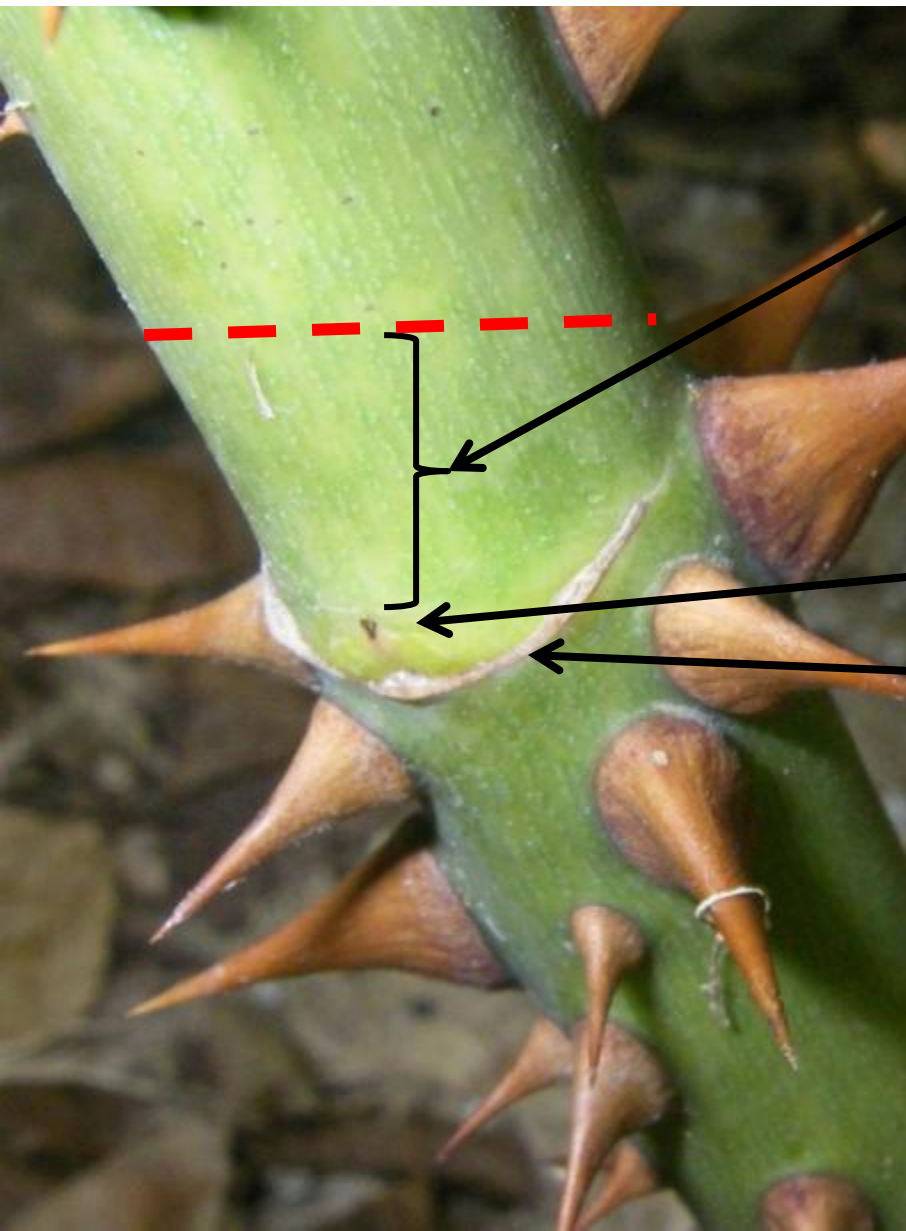


Living Mulch

2 to 4 inches
of Mulch



Dead Heading



**1/4 to
3/8 inch**

**Bud
Leaf line**

5 leaflet



Pruning

- **DO NOT** prune young bushes < 18 months
 - They need as much leaf as possible to feed and develop roots
- Take only the flower and Float in a Vase



Pruning – where do you start?



Fall Pruning

- **When?**
- Mid September to end October
- **What?**
- Remove dead wood
- Remove 6" to 12" of growth to stimulate flower growth for Thanksgiving and Christmas
- Remove everything smaller than a pencil.

Winter Pruning

- **When?**
- Prune in late winter before or when buds begin to swell (Dec. – Feb.)
- **What?**
- Remove dead wood
- Remove crossing branches rubbing against others
- Remove old, unproductive canes.
- Remove everything smaller than a pencil.

Pruning cont.

- Moderate pruning involves leaving 5-12 canes about 24 - 36 inches tall.
- Remove one third to no more than one half the length of previous season's growth.
- Remove suckers below graft union
- Keep center of shrub open



Free Pruning Classes

- Mesa Community College
 - S/E Corner Southern & Dobson in Mesa
- mesacc.edu/rosegarden-pruning.
 - Every Saturday in January and February
- 8:30 am
- Bring pruners / clippers & Gloves
- Donuts & Coffee supplied



Pruning – Finished

Cut above 24 – 36 inches

Take off all leaves

**Leave 6 to 10 strong
canes**

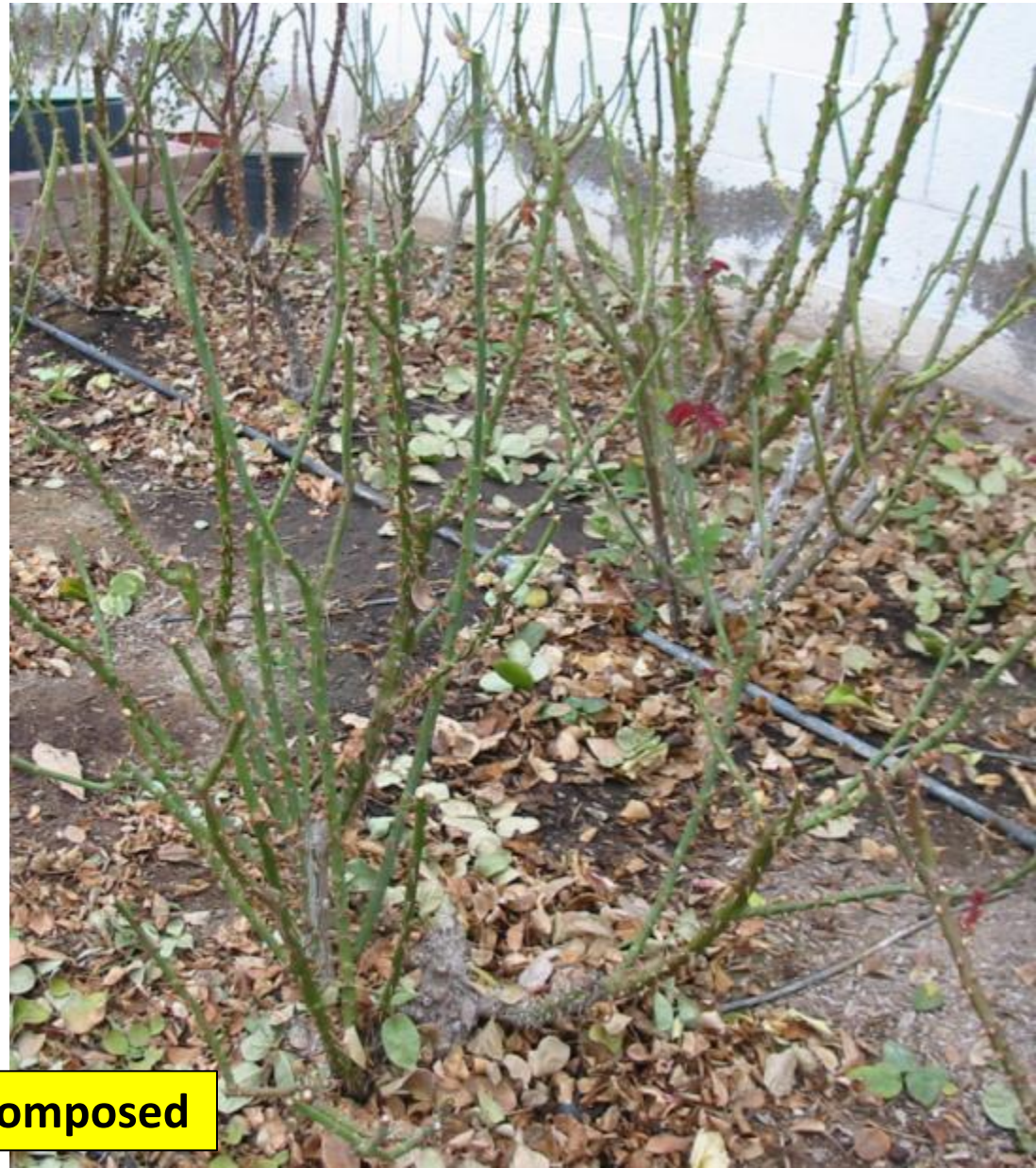
Clear the center

No crossing canes

**Take off everything
smaller than a pencil**

**Take out dead and old
wood**

**Take out root stock
growth**



Note – Mulch has completely decomposed

Where to cut



Questions? - Resources

- **MEVRS - <http://www.roses4az-mevrs.org>**
 - Meetings - MCC Library 2nd Thursday 6:15pm
- **Rose Society of Glendale**
 - www.roseglenaz.com
- **Free Pruning Class 2022**
 - Mesa Community College
 - S/E Corner Southern & Dobson in Mesa
 - All weekends in January & February - 8:30 am
- **MEVRS – Rose Auction online**
 - <https://www.roses4az-mevrs.org/rose-auction/>
- **Facebook – Arizona Rose Gardeners**



Places to buy roses

- **Looking for the latest roses? Here's our list to get you started!**

- **On Line – Mail order**

- Chamblee's Rose Nursery, 10% discount for ARS members, www.chambleerose.com
- David Austin Roses, 10% discount for ARS Members, free catalog available www.davidaustinroses.com
- Jackson and Perkins, 15% discount, use code MEMBER, www.jacksonandperkins.com, free catalog available
- Rogue Valley Roses, 10% discount, www.roguevalleyroses.com, free e-newsletter
- Witherspoon Rose Culture, FREE Rosebush with a new full membership, 10% discount, www.witherspoonrose.com, request their free catalog
- K and M Roses on Fortuniana <https://www.kandmroses.com/>
- Star Roses and Plants <https://www.starrosesandplants.com/>
- Weeks Roses <https://www.weeksroses.com/>
- New Kordes roses are on the [Newflora website](#)
- Certified Roses has an [online catalog](#)

- **Local Nurseries**

- Berridge Nursery – 4647 E Camelback Rd, Phoenix
- A & P Nurseries, 4 locations, Gilbert, Mesa (2), Queen Creek
- Treeland Nursery, 2900 S. Country Club Dr. Mesa
- Harpers Garden Center, 2529 N Scottsdale Rd, Scottsdale
- Moon Valley Nurseries, 3 locations, Paradise Valley, Phoenix, Scottsdale
- Agave Farms, NE Central & Indian School, Phoenix
- Arcadia Color Garden, 1828 N 52nd St, Phoenix
- Marbil Nursery, 15995 W Northern av, Litchfield Park.

Thank you