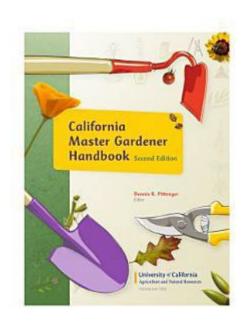
THE SUBJECT IS ROSES

PRESENTED BY ADA BREHMER







UC Master Gardener Program Mission Statement

"To extend research based knowledge and information on home horticulture, pest management, and sustainable landscape practices to the residents of California and be guided by our core values and strategic initiatives."



The Hildesheim Rose

Considered the oldest living rose. It is 1000 years old and grows on a wall at Hildesheim Cathedral in Germany.



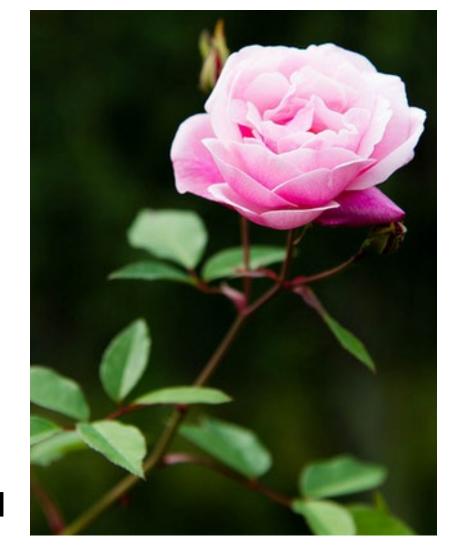
HISTORY

- Archeologists have found fossil evidence of roses dating back 35 million years.
- There is evidence of roses in nearly every continent, from Asia, to Europe to North America.
- Earliest mentions of the rose are the poems of the 600 B.C. Greek poet Sappho and the scholar Confucius, who described the roses growing in the imperial gardens of the Chou Dynasty (1122-221 B.C.).

- At the height of the Roman Empire, roses were considered a source and symbol of beauty and luxury. Bridal couples wore crowns of roses. Petals were added to bathwater, cosmetics and even food.
- India (ancient kingdom of Kashmir) is credited for the distilling process for the prized perfume known as "attar of roses".

- The Crusades, beginning in the 12th century, dramatically increased trade with the East, bringing more plant species, including roses into cultivation.
- Around this time, roses begin to appear in paintings, murals fabrics, and even architecture.

- While roses continued to be domesticated, distributed and enjoyed in places like France, Italy and England, it was trade with Asia that brought a flood of important new rose species to Europe. These wildlings became the ancestors of practically every modern rose.
- The China Rose (*Rosa chinensis*) arrived around 1789 and inspired rose breeders because it repeat-flowered.



- Enthusiasts collected pollen, crossed species, and cultivated many varieties, leading to an explosion of new roses.
- One enthusiast, the Empress Josephine, assembled perhaps the largest and most complete rose collection of her day at Malmaison, her chateau outside of Paris. It boasted several plants each of over 210 types of roses.
- Roses are introduced to America by immigrants and traveled west with the pioneers.



THE ROSE FAMILY

Roses belong to and dominate the plant family Rosaceae.

The group includes many other familiar plants:

Apple and crabapple trees.

Firethorn (Pyracantha).

Ornamental quince (Chaenomeles).

Strawberries and blackberries (fragaria and rubus).

Spirea (spiraea).... and more.



WHAT IS A ROSE?

 Roses are erect, climbing, or trailing shrubs, the stems of which are usually armed with prickles of various shapes and sizes, commonly called thorns.

• The leaves are alternate and pinnately compound (i.e., featherformed), usually with oval leaflets that are sharply toothed.



WHAT IS A ROSE

(CONTINUED)

- The flowers of wild roses usually have five petals, whereas the flowers of cultivated roses are often double (multiple sets of petals).
- Rose flowers' size range from tiny miniatures .5 inch in diameter to hybrid flowers measuring more than 7 inches across.
- The rose plant's fleshy, sometimes edible, berrylike "fruit" is known as a hip and usually ranges from red to orange in color.





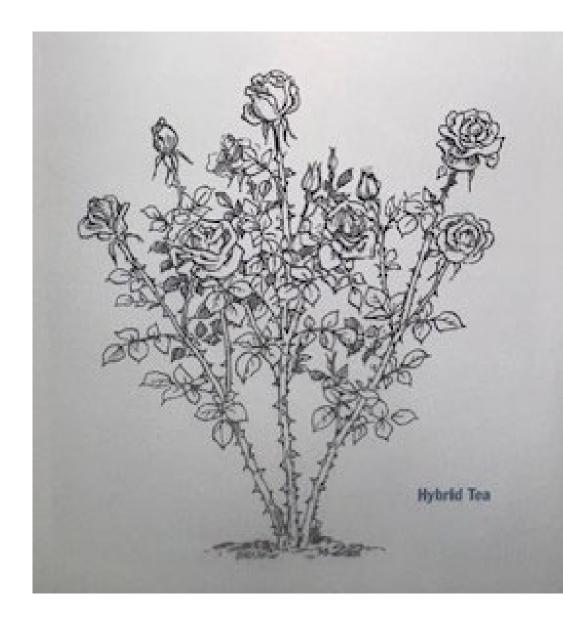
TYPES OF ROSES

- Hybrid Teas
- Grandifloras
- Floribundas
- Polyanthas
- Climbers/Ramblers
- Miniatures
- English/Austin
- Shrub
- Oldies but Goodies



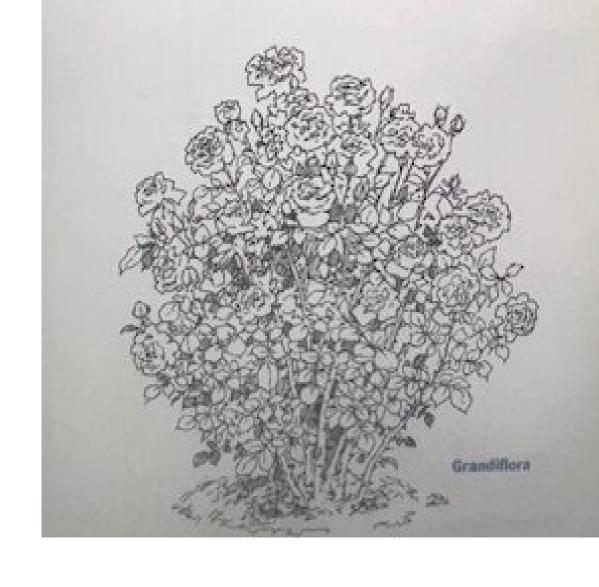
HYBRID TEAS

- Nobility of the rose world.
- Medium to tall bushes, generally with a vase-shape profile.
- Big, gorgeous, one-to-a-stem flowers.
- Often grown with long cutting stems.
- Great choice for bouquet lovers.
- They bloom profusely in spring, then continue to produce blossoms – either in flushes or continuously until frosty weather.



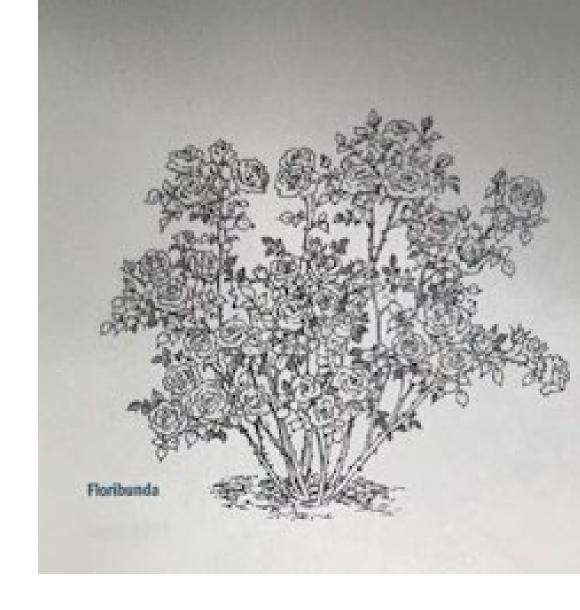
GRANDIFLORAS

- Big, upright plant with large blossoms.
- Flowers appear in clusters (like a Floribunda).
- Bloom continuously throughout their growing season.
- Subclass of the hybrid tea.



FLORIBUNDAS

- Nice in groupings.
- Suitable for smaller gardens or mixed flower beds.
- Flowers appear in clusters, often some are in bud while others are fully open.
- Bloom continuously throughout their growing season.
- These are outstanding landscaping roses.
- Shorter, more compact plants.



POLYANTHAS

- Similar to floribundas, but older and less intensely bred.
- Distinguished by a nice, compact, shrubby habit and a profusion of smaller-sized flowers.
- Bloom continuously throughout their growing season.



CLIMBERS/RAMBLERS

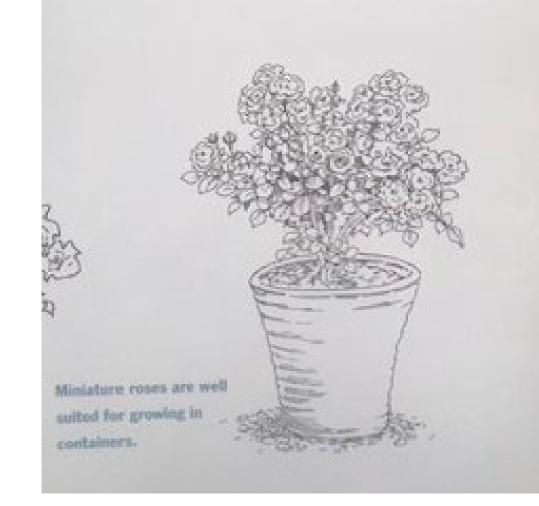
- Naturally develop, long, pliable, canes.
- Suitable for training on a support (a tree, a trellis, a fence, an archway, etc.)
- Older rambling roses bloom just once every spring; modern climbers bloom continuously.
- Not considered vines because they have no way to attach to a support.
- You, the gardener, must provide support with judiciously placed ties.



MINIATURES

- Little, compact rosebushes.
- Small leaves, small buds, small flowers....all in scale with each other.
- Full of color all season long.
- Often winter hardy because they are grown on their own roots.
- Great for growing in pots.





ENGLISH/AUSTIN

- British nurseryman David Austin successfully combined beautiful, fullpetaled, richly fragrant "old roses" with modern ones to get plants that have improved disease-resistance and much longer blooming period.
- For this reason, this group is frequently referred to as "Austin roses".
- Occasionally, a worthy new rose of this type is offered by other breeders under the more generic term "English rose".



SHRUB ROSES

 Catch-all term for many roses which generally have the following characteristics:

*Big, broad, shrubby habit.

*Weather resistant, cold hardy, and able to tolerate hot summers.

*Disease resistant.

*Less refined but often lovely and have fragrant flowers.

 Shrub roses are bred to be covered in blooms throughout the growing season.





OLDIES BUT GOODIES

Many old roses have been lost to history.

 But many are still in commerce and are enjoying a resurgence in popularity, thanks to their tough carefree nature and heady fragrance.

 Some of these hardy beauties survive to this day in abandoned fields and homesteads and old churchyards and cemeteries.

 There are many groups dedicated to the preservation of the old roses.

Locally, check out the website for "The Heritage Rose Group in Sacramento".

 Amador County Master Gardeners have a beautiful Heritage Rose Garden. We encourage you to visit.







TREE ROSES/STANDARDS

- Compact, continuous blooming shrub atop a tall bare stem.
- Many tree roses are double grafted. One graft is at the base of the "tree trunk", another is at the top of the "tree trunk". A rose bush of the desired variety is grafted at the top of the cane.
- Some tree roses have as many as four grafts at the top of the cane; yes, four different varieties of roses, making for a spectacular flower display.
- Tree roses can face winter challenges.
- If container-grown, Rose Trees can overwinter inside an unheated garage or shed or other structure out of the elements after the plant has gone dormant.



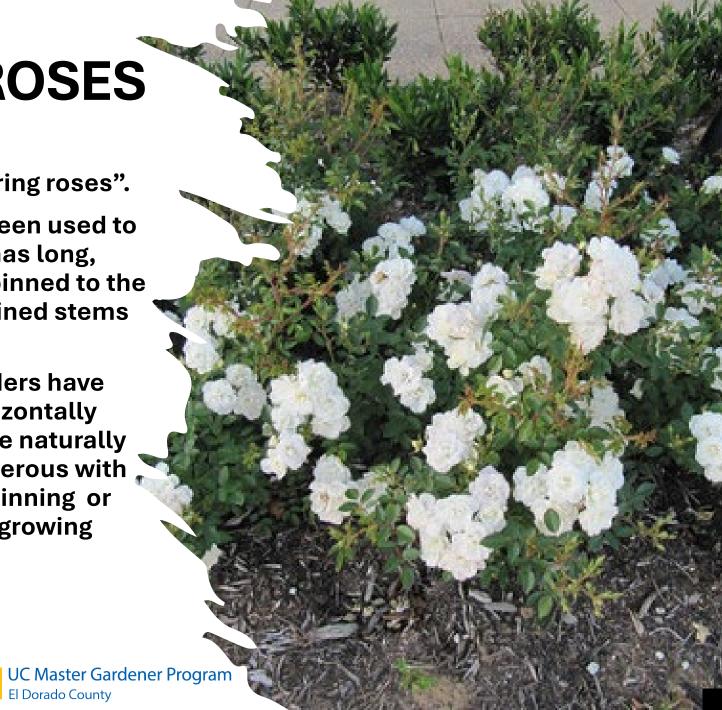
GROUNDCOVER ROSES

There are two kinds of "ground covering roses".

 Certain climbers or ramblers have been used to carpet a slope. As long as the rose has long, pliant canes, it can be anchored or pinned to the ground at intervals. Horizontally trained stems tend to flower more.

 However, in recent years, rose breeders have succeeded in developing actual horizontally growing "groundcover" roses that are naturally low growing, dense in habit, and generous with flowers. These roses don't require pinning or pruning; they bloom throughout the growing season.

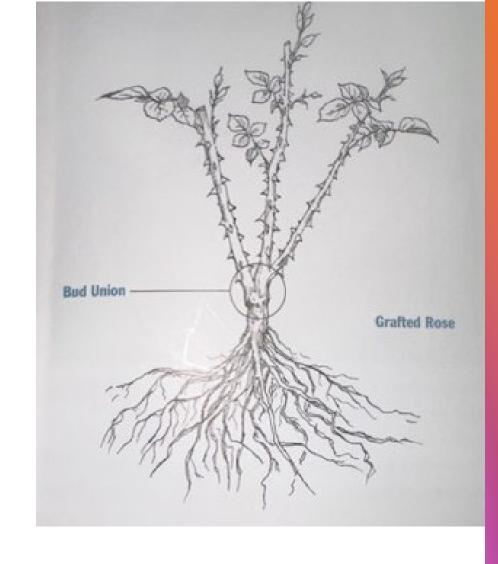
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BEFORE YOU PURCHASE – YOU SHOULD KNOW.....

- For over 80 years, rose growers have offered mainly grafted rose plants.
- A grafted plant is really two plants.
- The stems (or "canes", as rose stems are called)
 is one plant and the root system is the second
 plant.
- Commercial growers "bud graft" roses.
- A bud is removed from the desired variety, inserted under a flap of bark, low down on a stem of the rootstock plant.
- The introduced bud becomes the recipient of all the plant's energy. Thus, a new plant begins to grow atop the rootstock.

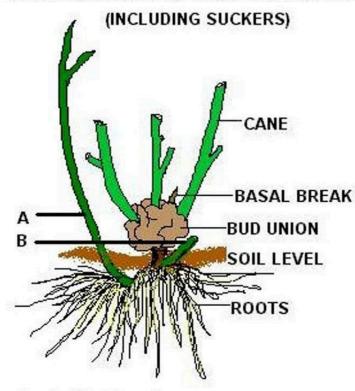


BEFORE YOU PURCHASE -YOU SHOULD KNOW.....

(continued)

- The grafted plant will result in a weather-tough, vigorously growing, disease resistant root system, adaptable to certain types of soils and a possibly more frail, but desirable "scion" on top.
- A grafted rose is easy to spot; the place where the two plants were joined is visible as a scar or bulge. This is called a "bud union".
- Suckers (errant canes) emerging from below the bud union are unwelcome.
 - *If the suckers produce flowers, they will not look like the scion.
 - *The suckers will grow to unwanted heights and in undesirable directions.
 - *The foliage can be really different from the rose you planted.

THE PARTS OF A GRAFTED ROSE



- A = Sucker from the roots
- B = Sucker from rootstock, below grafts

BEFORE YOU PURCHASE YOU SHOULD KNOW... ABOUT OWN-ROOT ROSES

- All roses were once own-root roses. This includes the popular old garden roses, the richly fragrant bourbons and damasks.
 These roses have always been grown from rooted cuttings.
- This old propagation method is now being applied to newer roses, with high standards for plant quality, adaptability and toughness.
- The more inherent vigor a rose variety has, the greater the chances are for growing it on its own roots.
- If the "mother" plant, which is the source of the cutting, is healthy, virus-free, or "clean", the offspring will be so as well.
- Growers that propagate own-root roses have found that these roses tend to develop more branches, in a more evenly formed symmetrical shape. (Grafted roses often have a onesided profile).



BEFORE YOU PURCHASE YOU SHOULD KNOW...... ABOUT OWN-ROOT ROSES (continued)

- Own-root roses will NOT produce suckers.
- Own-root roses require less time in the field before they are garden ready.
- Younger roses are smaller, making them easier to plant.
- If a bitter winter kills the top of the plant, the resprouted plant will still be the same rose. Your rose will come back "true to type".
- Over time, there is no variability in flower color (grafted roses sometimes produce variation in flower color).
- Own-root roses appear to have greater longevity than grafted roses.







SELECTING AND PLANTING

- Bareroot roses and potted roses
- What to look for
- Rose awards, rose tags, patents
- Site selection and preparation
- Pre-planting care
- How to step-by-step
- After planting care

BAREROOT ROSES

- Roses are raised in large production fields and harvested while young and full of energy reserves.
- They are dug up in the fall; roots are cleaned of soil and placed in cold storage which keeps them dormant.
- Garden centers order in advance and keep the roses cool to prevent early sprouting.
- Usually offered in late winter/early spring.
- Available through catalog sales.



ADVANTAGES OF BAREROOT ROSES

- Dormant plants can be planted earlier in the spring.
- They will live off their starch reserves when they emerge from dormancy.
- Tend to adjust well, without transplant trauma.
- Ease: roots have never been confined; they are "ready to go".
- Affordability: generally, less expensive because you provide the soil and location (no need for a pot).

WHAT TO LOOK FOR:

- Healthy stems, canes should be intact and undamaged.
- Canes should not be dried out at the tips.
- Canes should be thick, succulent, and green, but not yet leafing out.
- Healthy roots: living, viable roots that are flexible.
- Damaged, drying and dead roots are browned or black (they may even have a rotten smell). Pass these up.

Tip: get these in the ground as soon as possible.



POTTED ROSES

- Springtime is prime potted roses season.
- May have been bare root and potted by the nursery.
- Probably came from the growers in pots. May be in 1, 3, 5, gallon pots. May even be in a 4" pot (miniature).
- Are in good fertilized potting soil.
- Shop when weather has turned warm, and all danger of frost is past.
- Will be available all year long.
- Are ready to be transplanted into a new, larger pot or into your garden soil.
- Planting can be delayed as needed.



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ADVANTAGES OF POTTED ROSES

- Instant garden.
- Plant can be inspected before purchase.
- Choice of plant size.
- Plant can be in bud or full flower, allowing the buyer to select by color, scent, and size of bloom.





WHAT TO LOOK FOR:

 Almost every variety of rose starts out with red or maroon leaves; they soon turn green, some quite glossy others matte green. This rose is just getting started; it may be a better buy than one in full leaf.

 Chewed leaves: caused by a harmless caterpillar or a voracious Japanese beetle. Don't bring trouble home with you. Alert the garden center.

• Chewed petals: a small pest called "rose chafer" or Cucumber beetles may be present. Leave it at the garden center.

 Webs: these are made by spider mites, a very tiny pest related to spiders. Leave it at the garden center.







WHAT TO LOOK FOR

(continued)

- Ants: while the ants won't harm the plant, they are drawn to the honeydew secreted by aphids, an often-serious rose pest. Don't bring it home.
- Avoid a plant that has rusty, spotted or blotchy leaves, or one disfigured by gray powdery fuzz or mildew.
- Yellow leaves might be a sign of disease or might be a protest from a thirsty plant.
- Root check: if roots are questing out of the holes at the bottom of the pot, this rose may be rootbound. It's not an ideal condition but can still be a viable rose for your garden.



ROSE AWARDS AND PATENTS

- Yes, even roses receive awards.
- The breeder or company that is the recipient of the award(s) can then promote that rose as an "Award Winner".
- What is a Patented Rose? For a rose hybridizer, a patent protects
 the variety for seventeen years. Someone else can propagate this
 rose during that time, but only if the hybridizer is paid a royalty fee.
- For the home gardener, a patent indicates that in the judgement of the developer this rose shows great merit.
- Patent tags will show a patent number or "PPAF", which stands for patent pending/applied for, in addition to the rose name, and who owns the patent.

AARS TEST GARDENS

- In 1938 W. Ray Hastings, creator of "All-America Rose Selections", approached Charles Perkins, president of the <u>Jackson & Perkins</u> company, with an idea for a rose testing program.
- In 1939, a meeting with the seventeen largest rose growers resulted in the creation of the non-profit organization, "All-America Rose Selections, Inc." (AARS), with the goal of evaluating and promoting outstanding roses. The first rose trials began in 1939 in AARS test gardens throughout the US.
- The "All-America Rose Selections" continued from 1940 until 2013. The award is considered the most prestigious rose award in the United States.
- AARS was discontinued after 2013 and was replaced by the new "American Garden Rose Selections" program.

AARS vs AGRS

- The AARS selection process began with a rose grower submitting a new rose (or roses) to AARS for testing.
- Roses were grown in official rose test gardens, typically universities and rose nurseries throughout the US. Roses would be evaluated for two years on many qualities, including disease resistance, flowers, form, and ability to grow in many climates.
- The AARS award winners chosen at the end of the trial period could display the AARS brand on their rose tags and in nursery catalogues.
- The AGRS promotes a more rigorous national rose trial program, one that identifies and recommends the best roses to gardeners that lived in DIFFERENT REGIONS of the United States.
- The first AGRS winner was announced in 2016.

PLANTING YOUR ROSES

- A good start makes all the difference in the plant's performance, not only in their first year and for years to come.
- Site choice: Full sun, six to eight hours a day.

Shelter from the wind.

Elbowroom; give it space, it will grow.

- Plant in the spring after danger of frost is past. Check for frost dates in your area.
- A new rose bush needs:

Good organic-matter content. This helps hold moisture and add nutrition.

Good drainage. Roses don't like "wet feet".

pH range between 5.6 to 7.2 or slightly acidic.

No obstructions. No large rocks or tree roots.

PRE-PLANTING ROSE CARE - BAREROOT

- Unpacking slide the plant carefully from its plastic or paper sleeve, pick off any packing material such as wood shavings.
- Inspect the plant carefully.
- Cut off any damaged, blackened or rotten looking roots.
- Get rid of any damaged stems.
- Shorten the canes, a good viable cane should be cut back to about 8 inches long. This
 reduces stress.
- Good roots can be trimmed but no more than an inch.
- Use good sharp clippers, not scissors.
- Re-hydrate –prepare a bucket of lukewarm water; put the roots in, up to where they
 meet the canes. Let the plant drink for a few hours or overnight.

PLANTING BAREROOT ROSES

- Prepare the hole hole should be deep enough to accommodate the roots comfortably, one to two feet deep and wider than the roots.
- Loosen the soil around the hole with a trowel.
- Mound up a cone of back filled garden soil (50/50 mix) in the center of the hole on which to rest the plant. Place the plant, spreading the roots over the cone, and while holding the plant with one hand, gently scoop soil around it. Tamp down the soil loosely to eliminate air pockets.
- Water well deliver a good, slow soaking; this will eliminate air pockets and make the roots very happy in their new home.

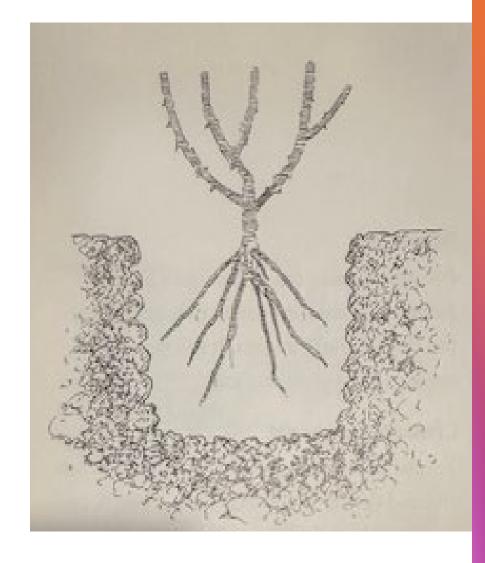


PRE-PLANTING ROSE CARE – POTTED ROSES

- Potted roses, too, appreciate a little pampering before you put them in the garden.
- Put the pots in a sheltered location out of the hot sun and wind.
- Give them a good drink of water, until water runs out of the drain holes.
- Take out damaged stems.
- Remove blooming flowers; you want to direct energy to the new roots, leaves and stems.
- Leave as much good foliage as possible; this will provide the food that's needed to establish a strong plant.
- Plan to plant early in the morning or late afternoon/evening. Avoid hot sun.

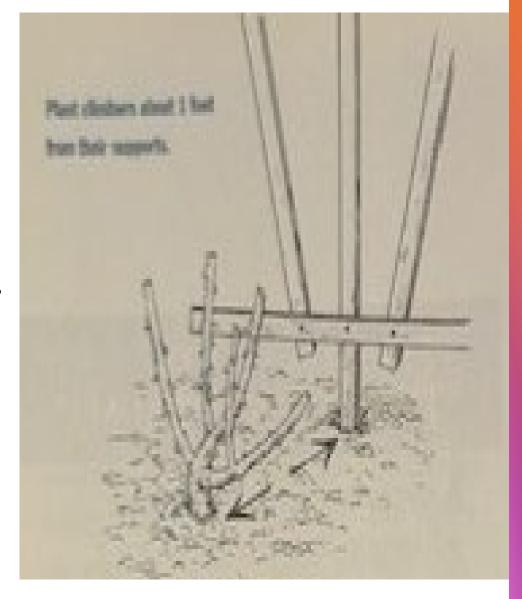
PLANTING POTTED ROSES

- Prepare the hole. Check the hole depth and width by putting the potted plant into the hole.
- Adjust the hole size to accommodate the pot, leaving room at the bottom and sides.
- Loosen the soil at the bottom and sides of the hole; just roughen it with a trowel.
- Lay the pot on its side and gently remove the rose from the pot.
- Using your fingers, gently tease the roots loose on the sides and bottom before putting the rose into the hole.
- With one hand, center the plant in the hole and gently scoop the soil under and around it (50/50 mix).
- The joint between roots and canes should be at ground or slightly above ground level.
- Water well; slow soaking will help your rose transition from pot to garden.



PLANTING CLIMBERS

- Decide on a support. It can be a trellis, an archway, a pillar, a fence, even a dead tree.
- Make sure the support is in the ground and secure before planting.
- Position the rose about a foot from the support, allowing room for the roots but close enough for you to easily tie back the canes.
- Follow the planting guidelines for either bareroot or potted roses.
- Now you, the gardener, must work with the canes until established. Use ties that will hold the canes securely but are flexible enough not to damage or constrict the stems as they grow.



POST PLANTING CARE

- The days and weeks following initial planting are critical to your new rose's success.
- There are TWO simple things you must do to make sure the plant will thrive:

WATER AND MULCH





HOW MUCH WATER AND HOW OFTEN

- The amount and frequency of watering needed in your location is a matter of trial and error.
- In the growing season, roses need up to 2 inches of water per week. In our area, rainfall won't provide this.
- Water faithfully. Try to establish a schedule. Drip systems on timers are recommended.
- Water your roses early in the morning. Give them a good drink so your roses will tolerate and even enjoy hot days, rather than become stressed.
- Afternoon watering is less efficient because some moisture will be lost to evaporation.
- Evening watering is not the best idea, because dampness can persist around the plants all night, inviting disease.
- Whichever way you water (hose, soaker hose, bubbler, watering can), water at the base of the bush.
- And, having said all the above, don't overwater. If in doubt, treat yourself to a soil moisture meter and check each plant.





WHY MULCH?

- Mulch holds in soil moisture so all the watering you're doing is retained.
- It moderates fluctuations in soil temperature, so even if your weather is unpredictable, your rose plants are spared the stress of temperature extremes.
- Mulch smothers weeds and discourages weed-seed germination.
 Weeds compete with your roses for soil moisture and nutrients.
 Stop the weeds before they start.
- And, depending on the mulch material, as it breaks down it adds a bit of welcome nutrition to the soil around your roses.
- How much mulch? 3 to 4 inches during the growing season and at least 6 inches when it's a protective winter covering. Modify these amounts according to your climate and growing conditions. Keep the mulch 4" to 6" away from the base of the plant.
- What kind of mulch? Wood or bark chips, compost, mushroom compost, and straw.



FERTILIZING

- Fertilizer is a plant food. A well-nourished plant is healthier, because it receives the nutrition it needs to resist diseases and pests.
- All common plant fertilizers show three numerical values on their labels, in order, for the following elements:

N (nitrogen): For enhancing the growth of leaves and stems.

P (phosphorus): For good flowering and strong root growth.

K (potassium): For overall good growth, vigor, and resistance to disease.

- A "complete" fertilizer will a have a label listing of three numbers (5-5-5), (10-10-10), which is an equal dose of all three.
- For roses, nitrogen is the priority. It goes to the leaves, which generate the energy that
 goes to bud formation, and thus, more flowers. Make sure you use a fertilizer with
 plenty of nitrogen but includes the other two main nutrients, phosphorus and
 potassium.

TYPES OF FERTILIZERS

- Organic Adds valuable/desirable organic matter to the soil. Acts slowly (less chance of burning). However, because it acts slowly you will not see dramatic result (composted manure, fish emulsion, alfalfa meal, blood meal).
- Granular easy to apply, no mixing just sprinkle on the ground, scratch in and water. Needs to be replenished every four to six weeks.
- Powdered gets to the roots quickly but must be diluted in water first.

TYPES OF FERTILIZERS

(CONTINUED)

- Liquid concentrated; a little goes a long way but must be diluted according to label directions before applying.
- Slow-release very convenient; apply once, maybe twice in a season.
 May not be enough, so it may need to be supplemented.

HINT – WATER YOUR ROSEBUSHES BEFORE YOU FERTILIZE. WHEN YOU ADD THE FERTILIZER, IT WILL ENTER THE SOIL MORE EVENLY AND MORE GRADUALLY. WATER, AGAIN AFTER YOU FERTILIZE.

WHICHEVER FERTILIZER YOU USE – FOLLOW LABEL DIRECTIONS, IF IN DOUBT LESS IS BETTER!

WHAT'S UP WITH EPSOM SALTS?

- Epsom salts is a magnesium sulfate; for garden soils that are low in magnesium, adding this chemical will provide an obvious boost.
- It is not a traditional fertilizer and its an optional addition.
- It is a rose "treat", inspiring the plants to generate more flowering canes.





WHY PRUNE

Prune for health: cutting out older, dead, diseased, and damaged wood allows light and air to be admitted and a rose bush is revitalized.

Prune to improve quality: a properly pruned rosebush has more and better flowers.

Prune to control size: once a rose reaches 3. its mature size, judicious cutting keeps it in bounds, filling, but not crowding its allotted space in your garden.

El Dorado County



WHY PRUNE

(CONTINUED)

- 4. Prune for beauty: with the right cuts in the right places, you can shape a bush attractively, encouraging it to grow as you want it to.
- 5. Prune to get to know your roses: as you work with your plant over time, you will discover how to encourage its best performance.



PRUNING HINTS

- After you've made your pruning cut, look at the pith. The pith is the innermost part of the stem and is the best clue to whether a stem is still alive and viable. If the pith is brown or black, recut until you get white pith.
- Not all leaves are the same on a rosebush. On the stem, you may find groups of 3, 5, or 7 leaves. Typically, the most viable ones are the ones with 5 leaves. Make it a practice to prune back to just above such a group (a bud eye will be there).
- When you finish pruning, remove all leaves from the bush and dispose of them.





PRUNING TOOLS

- Clippers/Pruners: These are indispensable, useful for everything from pruning out twigs to cutting for bouquets. They should also be able to handle most canes.
- BYPASS pruners have two sharpened blades that pass over each other to make a clean and precise healthy cut in a scissor action. Ideal for cutting delicate stems because the bypass action is less likely to cause bruising and damage to growth.
- ANVIL pruners have one blade that closes onto a cutting block. They are ideal for cutting thicker stems and woody pruning. An anvil cut is more powerful than a bypass cut with minimal effort required.
- RATCHET pruners have either anvil or bypass blades and feature ratchet springs and mechanisms to make it easier to cut through a stem in a series of stages.











PRUNING TOOLS (CONTINUED)

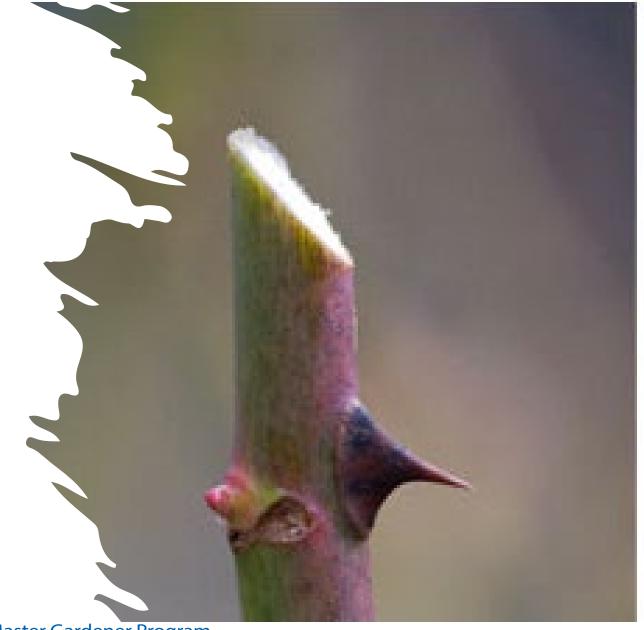
- Loppers Can be bypass, anvil or ratchet. Use when taking out thick canes (between 1 ½ to two inches in diameter) especially at ground level, so you can get the leverage you need to make a good, clean cut.
- PRUNING saws perfect for cleaning up stubs at the base of the plant or when thick canes are too crowded for the lopper blade.
- All equipment should be clean and sharp.
- Gloves: Leather gloves and/or gauntlet gloves.
- Sharpener for the blades.





THE KINDEST CUT

- Cut on a slant: the theory is that water will run off a slanted cut, whereas a blunt cut is slower to dry out after a rain allowing rot or disease to enter the stem.
- Use the proper tool: sharp, clean clippers or pruners for most canes and loppers for thicker canes.
- Cut near a bud eye: make the cut about a ¼ inch from the bud eye – not too close but not too far away.
- It's best not to cut at random or make blunt cuts.



WHEN TO PRUNE - IT DEPENDS.

 Early spring is considered the "best" time to prune roses.

 However, in our foothills we have to prune to force the rose to go dormant and rest for a few weeks before it starts new growth.

 In El Dorado Hills, Shingle Springs, Cameron Park, and lower- Placerville, we recommend pruning from mid-January to mid-February.

 As you move to the upper end of Placerville into higher altitudes you may want start later (add one week for each 500 feet of altitude).

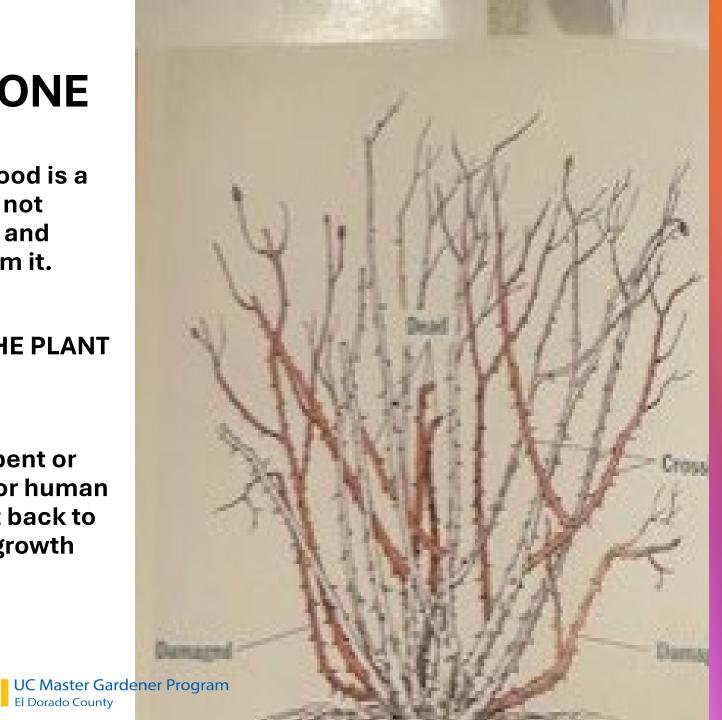
• If your area has hard frosts, wait until the frosts are over.





HOW TO PRUNE -STEP ONE

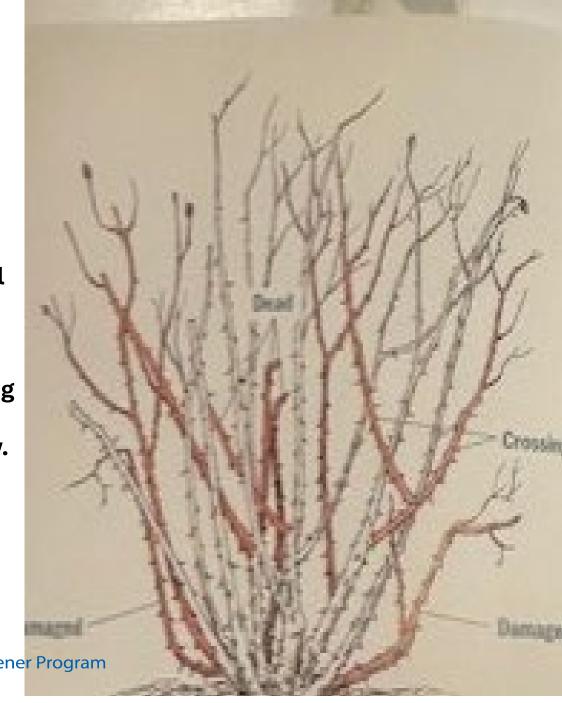
- Always prune out dead wood dead wood is a different color, not green, not reddish, not lustrous brown. It's dull brown or gray and brittle. No new growth is sprouting from it.
- CUT OFF AS CLOSE TO THE BASE OF THE PLANT AS POSSIBLE.
- Cut out damaged wood any broken, bent or cracked stem (whether by wind or ice or human intervention) that will not recover. Cut back to below the injury to the point of active growth (look for a bud).



HOW TO PRUNE -STEP ONE

(CONTINUED)

- Remove misplaced stems this includes canes that are rubbing together, growing in the wrong direction (toward the center or into a fence or wall or trailing on the ground).
- Remove suckers these are errant canes emerging from below the graft union. These are sprouting from the rootstock. You do not want them to grow.

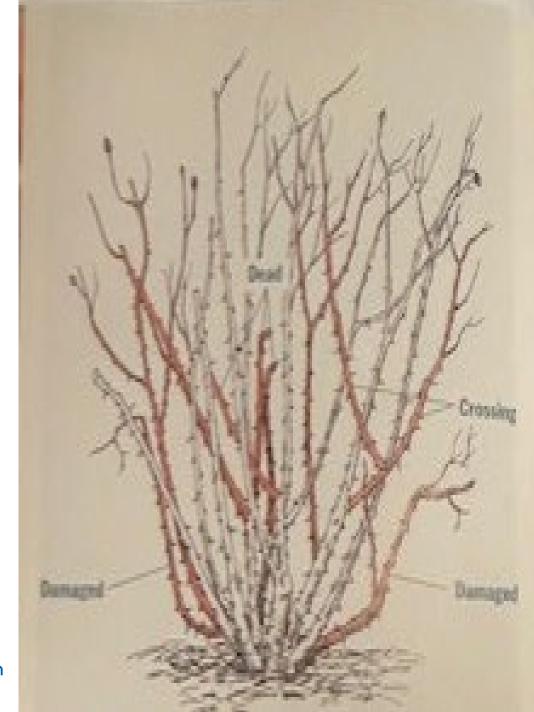






STEP TWO - THINNING

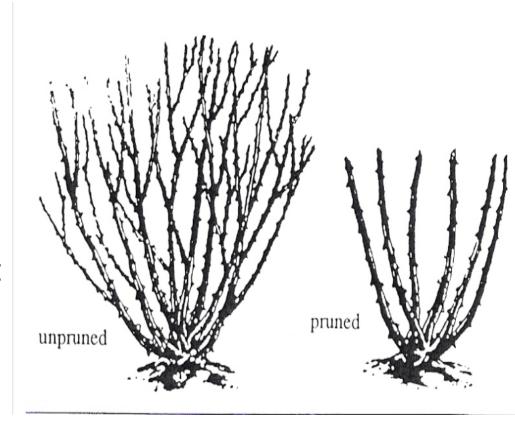
- Thin out crowded stems: stems that are jostling for limited space need to be thinned out. Your goal is to have the remaining stems separated from each other. Give them growing room, light, and air.
- Thin out crossed stems, stems that rest on each other; stems that are growing sideways should go, too.
- Cut back trailing stems: these are "pioneer" canes, or the ones that heading upward and outward.
 Shortening them will give you a neater looking bush.





STEP THREE -STRATEGIC PRUNING

- Now that you've taken all the non-negotiable stems out of the way and done some thinning, you have the chance to encourage your rose bush to develop an attractive profile and grow in the direction you want.
- Aim for the "Urn" or "Vase" shape: the goal is to have evenly spaced stems (flowering canes) on all sides of the bush, with the center of the plant somewhat open.
- Fine tuning: you will see that new growth alternates along a cane. Some buds face outward, some inward, some to the side. When these begin to swell and send out new growth, that's the direction they will be headed. This is your opportunity to fine tune the rosebush. You can do this by simply removing the bud or allowing it to grow to a desired length.



DEADHEADING

- Deadheading is really pruning during the growing season.
- It really only means cutting off dead or dying flowers. Why do it?

It looks better.

It conserves energy for the current flowering season.

It encourages re-flowering.

- Have a basket handy –separate the petals from the stem, dry the petals and enjoy.
- And, you don't have to wait for flowers to wilt. When you cut for a bouquet, the benefits are the same. Fill those vases for yourself and your friends.

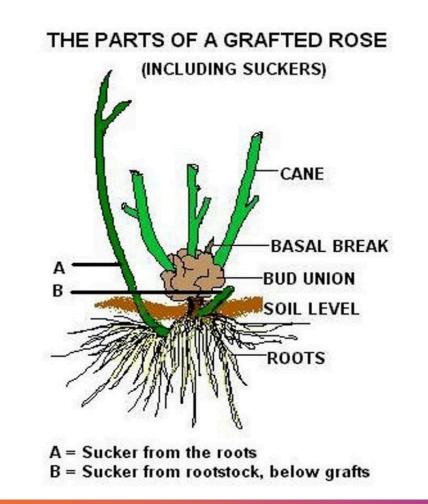






ALWAYS, ANYTIME CHORES

- Clip off any suckers that are generated below the graft union.
- Pull weeds that encroach on the rose plants.
- Remove fallen leaves and destroy diseased clippings, to prevent pests from gaining a foothold.
- Cut out dead or diseased wood whenever you see it.
- When spraying anything never spray on a windy day. Always follow label instructions to the letter. Wear gloves and other protective clothing.





CLEANING UP

- Clean up after a rose pruning session.
- Plant debris left lying around can create a breeding ground for pests and diseases. Pick up as many leaves and petals as possible. Do not compost.
- Thorny cuttings are no fun to have around. Don't compost in your home compost pile; send them off to be commercially composted.





Common Rose Diseases



Black Spot



Botrytis/Gray mold



Canker



Downy Mildew



Fasciation/Malformation



Powdery Mildew



Rose Mosaic Virus



Rust



Common Rose Pests



Aphids



Cane borer



Caterpillars -Rose sawfly, Rose slug



Hoplia beetles



Leaf cutter bees



Scale



Spider mites



Thrips

UCCE Integrated Pest Management for Roses - https://ipm.ucanr.edu/PMG/GARDEN/PLANTS/rose.html



Integrated Pest Management Best Practices

Encourage beneficial insects (biological controls):

Lacewing



Mites, eggs, aphids

Lady Beetle



Mantis



Aphids, whiteflies Many insects – good and bad Aphids, mealybugs, whiteflies

Soldier Beetle



Aphids, beetle/moth eggs

Assassin Bug



Any insect!

Pirate Bugs



Mites, thrips

Syrphid Flies



Parasitic Mini Wasps



Aphids, caterpillars from the inside out



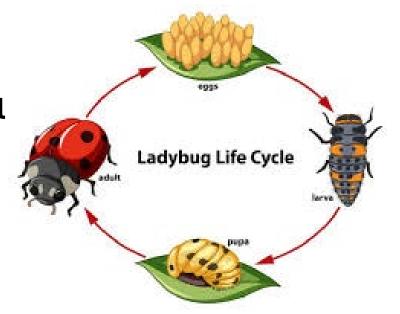
Beneficial Insects in the Garden - Tips

 Control ants - they attack the natural enemies of honey dew producing pests.



 Know what natural enemies look like as adults and immatures.

 Avoid using broad spectrum pesticides – they kill natural enemies as well as pests.



SOUND PRACTICES AND LEAST TOXIC PEST CONTROLS

- Clean up trim/prune off damage and dispose of it. Pick up debris on the ground.
- Water early in the day from the bottom keep foliage dry.
- Keep an eye out for early detection.
- Hand pick (caterpillars, weeds).
- Water blasting (aphids, spider mites).
- Soap sprays.
- Check often and be persistent.



Aphids



Cane borers



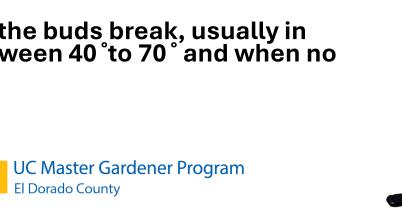
Spider Mites



DORMANT SPRAYING FOR ROSES

- Purpose: Dormant oil applications can aid in smothering the eggs of aphids, mites, and other such creatures that overwinter on our roses.
- Dormant application includes dormant oils, lime sulfur, and a copper- based spray.
 Mixtures of these active ingredients can be purchased. Follow directions on the
 label. Do not add or substitute any ingredients.
- How to: The rose bush should be bare. All leaves should be gone or removed.
 Notice that these applications are very thick, kind of sticky, and may have a bad odor.
- When to: Apply in late winter or early spring before the buds break, usually in January or February. Temperature should range between 40° to 70° and when no rain, fog, or frost is predicted for 24 hours.











FIRST CHOICE WHEN NEEDED-LESS TOXIC PESTICIDES

 Insecticidal Soaps - Controls aphids and white flies; full coverage is needed with possible repeat applications.



 Insecticidal oils – Aphids, white fly, scale, spider mites, thrips. Includes petroleum-based oils. (superior, narrow range, and horticultural oils) and plant-based oils (neem and canola oils).



IMPORTANT GUIDELINES FOR **CHEMICAL CONTROLS**

- Select the right product for the problem.
- Go as least toxic as possible.
- Read the label thoroughly and follow instructions.
- Wear protective clothing.
- Use products as directed.

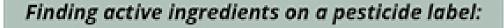






Watch for signal words

Dispose of properly.



Active Ingredient: Potassium Salts of Fatty Acids

Other Ingredients

Total

1.0% 99.0%

100.00%

KEEP OUT OF REACH OF CHILDREN

CAUTION

Net Contents: 32 FL OZ/946 mL

Pesticide labels show the active ingredient in a product. This example shows the active ingredient in some insecticidal soaps.





Local Rose Societies

Sierra Foothill Rose Society

- Meets at 7 pm on the 1st
 Thursday of the month (July and August excepted) at the Maidu Community Center, 1550 Maidu Drive in Roseville.
- Holds an annual pruning clinic on the second Saturday in January open to all.
- Lots of valuable online resources.
- Leave online questions for Consulting Rosarians.



HAVE A GARDENING QUESTION?

 Master Gardener volunteers are available to help you solve your garden problems and mysteries.

Office hours: 9 a.m. to 12:00 noon; days of the week vary seasonally.

Check the Master Gardener website: mgeldorado@ucanr.edu

Office location: 311 Fair Lane, Placerville, CA 95667; walk-ins are welcome.

- Leave a message on our office telephone: 530-621-5512. We'll get back to you!
- Use the on-line "Ask a Master Gardener" survey tool at our website: <u>mgeldorado@ucanr.edu</u>

2025 ROSE PRUNING DEMONSTRATION JOIN US

February 15, 2025, 9:00 AM - 12:00 PM

Sherwood Demonstration Garden, 6699 Campus Drive, Placerville, CA 95667

Join the Sherwood Demonstration Garden Rose Team headed by Dan Bowden for an upclose pruning demonstration in the SDG Rose Garden. (In case of rain, class will be rescheduled for 2/22/25). Registration is requested but not required.

Register at: mgeldorado@ucanr.edu

Go to Classes and Events and click on Rose Pruning.





Resources:

- www://ucanr.edu
- www.//ipm.ucanr.edu
- www://mg.ucanr.edu
- The New Sunset Western Garden Book
- California Master Gardener Handbook, Second Edition
- ucanr.edu (Division of Agriculture and Natural Resources)
- Jackson & Perkins- Beautiful Roses Made Easy
- Rodale's Illustrated Encyclopedia of Herbs
- landscapeplants.oregonstate.edu>plants
- missouribotanicalgarden.org>plants

