Cornell University
Cooperative Extension
Nassau County

## Rose Culture and Pruning

Roses have the distinction of being among the oldest cultivated ornamental plants found in today's gardens. Their flowers are loved for their shape, color and fragrance. Given sunshine and good growing conditions, roses can add beauty to one's garden or landscape.

## TYPES:

Roses (bush type) grow 1 to 6 feet and require no support.

1. Hybrid teas - Large blooms, one to a stem, particularly desirable for cut flowers, ever-blooming, usually fragrant.
2. Floribunda - Smaller plants than hybrid teas, smaller blooms in sprays, ever-blooming, vigorous, tolerating lower temperature than hybrid tea roses, excellent for landscape use.
3. Grandiflora - Forms larger flowers than floribundas, usually in showy clusters, tall, good for background border and cutting (3 to 6 feet).

4A. Shrub roses - Hardy and disease resistant, minimum care, free blooming, masses of smaller blooms (all season), wide range of sizes and shapes.
4B. Trailing roses - Produce long canes that creep along the ground, good on walks or as ground cover for banks, extremely hardy.
5. Miniatures - Plants ordinarily not over 1-1/2 feet tall and often smaller. Leaves and flowers very small. Used mostly for rock gardens, edging or containers. Most bloom continually. One of the hardiest popular roses.

6. Tree or Standards - Tree forms developed by grafting of bush roses on upright trunks. Requires elaborate winter protection.
7. Old-Garden roses - Varieties and species popular in colonial gardens, fragrant, flower in June.
8. Polyanthas - Flowers are flatter and smaller than floribundas and in large sprays.
9. Hybrid perpetuals - Large flowers, most do not bear continuously as do the hybrid teas, among the most cold-resistant of garden roses.

## Climbers produce long canes and require support.

1. Ramblers have small flowers in dense clusters. Flowers once a season on wood produced the preceding year.
2. Large-flowered climbers and ever-blooming climbers grow more slowly than ramblers. Flowers larger than ramblers useful for cutting. Flowers profusely in early summer and fall; a few scattered flowers in between.
3. Climbing hybrid teas, polyanthas and floribundas have flowers on second year wood identical to the bush roses but does not bloom as continuously as bush forms.

## PLANTING ROSES

Buy Grade \#1 labeled roses only from reputable sources.

## When to plant

Bare root roses should be planted only in early spring or late fall. Con-tainer-grown roses are best planted in early spring and fall, but can also go in during the summer.

## Planting site

(a) The site must have at least six hours of sun daily, preferably morning sun. Roses require a welldrained soil with a pH of 6.0 to 6.5 and high organic content. Test the soil pH before planting. See Home Grounds Fact Sheet A-1-0 for instructions. This will determine how much dolomitic limestone might have to be applied.

## Installing the plant

(b) Spacing - Space hybrid teas, grandifloras and floribundas approximately 3 ' apart, depending on mature or desired size of plant; shrub roses, a minimum of 4' apart; climbers 8 ' to 10 apart.
(c) Planting - For bare root roses, soak in water for several hours or cover with moist soil for several hours to several days before planting. Prune the tops if not done before purchasing by removing twiggy stems, damaged or badly spaced stems and shorten others to $8^{\prime \prime}$ to $1^{\prime}$ long. In the prepared bed, dig a hole 15 " deep and 18 " wide for each plant. Form a small cone-shaped pile of soil in the center of the planting hole and firm it down. Spread the roots uniformly over the cone. Fill in about half the remaining hole with soil and add water. When it drains, fill in the rest of the hole and water again. Be certain to keep the soil around newlyplanted roses moist, but not soggy. Root establishment is critical; do not allow soil to dry out. Regular watering should be done throughout the growing season. (1" to 1-1/2" of water per week if no rainfall.)
For container-grown roses, pruning before planting is usually not necessary. Water thoroughly a few hours before planting. In the prepared bed, dig a hole several inches wider than

# Rose Planting in 5 Steps 

## (Bare-Rooted Roses)

1 Prepare the entire bed by spading deeply. Dig each hole 15 " to 18 " wide and deep, large enough to accommodate the roots. Add a quart of compost, peat moss or other organic matter and mix well with the soil. Add a handful of super phosphate or bone meal to bottom of hole and mix with soil. Form a blunt pyramid of the mixture in the center of the planting hole.


2 Remove any broken or injured roots or canes, and canes less than pencilsize in thickness. Position rose on soil pyramid so the bud union (the swelling at the stem base) is just above the ground level after the soil settles in mild climates and about 1" to 2 " below the surface in climates where winter temperatures fall below freezing. Spread roots in a natural manner down the slope of the soil pyramid.


3 Work soil mixture around the roots to eliminate any air pockets. Firm the soil around the roots and add more soil until the hole is three quarters full.


4 Fill hole with water and allow to soak in, then refill with water. After water drains, check to see that the bud union remains at the proper level. Fill remainder of hole with soil and tamp lightly. Trim canes back to 8 inches, making cuts $1 / 4^{\prime \prime}$ above an outward-facing bud at a 45 degree angle.


5 Mound soil around and over the plant to 6 " deep. This protects canes from drying out. When buds sprout, gradually remove soil mound, probably within 2 weeks or so, checking every 2 to 3 days. Loosen name tag so it does not constrict cane. When vigorous growth starts, apply fertilizer according to manufacturer's directions. (Do not add a complete fertilizer to the planting mix. Doing so will
 delay growth and can injure the developing roots.)
the container in which the rose is growing. Remove the plant from the container by cutting down the side and carefully removing the plant without breaking the soil ball. Remove the box and do not plant in it even if the directions tell you to. Position the soil ball in the hole at the same level it was growing in the container. Fill around it with amended soil, packing down firmly. Water well.
(d) Winter protection - When planting bare root roses or container grown roses not in leaf, mound the soil 8" to 10 " high around the canes of bush and climbing roses; $3^{\prime \prime}$ to 4 " around miniatures. Remove the soil mound carefully when new growth is $1-2$ " long. Mounding gives protection from desiccation by sun and wind until new feeding roots develop; and with fall planted roses, affords winter protection.

## MAINTENANCE IN GROWING SEASON

1. Mulch - Use a 2 " to 3 " layer of mulch, such as wood chips, pine bark, pine needles or oak leaves to control weeds and to conserve moisture.
2. Water - Water well once-a-week with a soaker hose except in weeks when there has been 1 " or more of rain.
3. Fertilizer - Fertilize with 5-10-5, 10-10-10, 10-6-4 or similar formula in early spring when 3 " to 4 " of new growth is starting. Apply 3 to 4 pounds to 100 square feet or $3 / 4$ cup per bush around perimeter of plant. Avoid contact with plant. Then scratch in lightly and water thoroughly. Additional applications should be made monthly during the growing season, but only up to midAugust. For newly planted rose bushes, add fertilizer only after the first blooming cycle and thereafter only once a month. It is sound practice to top dress with compost or well rotted manure in the late fall to build up organic matter in the soil.

## Cutting

The first season new bushes are planted, it is best to cut flowers only

## Winter Protection for Long Island

(Note - Generally well-cared for roses do not need this special protection. This procedure is included for those growing roses in highlyexposed or extremely cold pockets on Long Island or those that want to offer their plants the ultimate in protection.)

A. first heap soil
B. pile on leaves

Protect standard roses by (C) loosening root, bending down and burying in (B) soil and covering with (A) evergreen boughs or (D)


Wrap climbers in burlap or heavy paper.
to remove faded blooms, leaving as many stems and leaves as possible to nourish the plant. When possible leave at least two five-leaflet clusters between the cut and the main stem. Remove all faded blossoms by cutting $1 / 4$ " above the nearest outward facing bud with the cut at a 45 degree angle.

## Pruning

1. Climbers and Shrub Roses Prune climbers just after they have flowered, removing faded flowers and shaping. Next year's flowers will be borne on the laterals of newer canes. The only pruning to be done on climbers in spring is to remove the oldest, winter killed canes leaving 5 or 6
shiny, green new ones and to correct shape and size.
2. Bush roses - In the fall, prune bush roses (hybrid teas, grandifloras and floribunda) back to $3^{\prime}-4$ ' to prevent the winter winds from whipping the canes about. Prune more thoroughly in the early spring when forsythia blooms. Cut out all diseased, winter killed or weak twiggy wood. A high or conservative pruning will result in more flowers on taller plants. A low pruning produces shorter plants with fewer but larger flowers. In either case, the pruning cut should be just above a bud that points outward. This will result in a well shaped plant.

## Pruning Methods

The basic technique for most pruning is to cut $1 / 4$ inch above the nearest outward-facing bud with the cut at a 45 degree angle (the higher point above the bud).


To prune hybrid tea and grandiflora roses, follow these steps: (1) high pruning for more flowers earleer or low pruning for fewer, bigger flowers later; (2) pruning to remove weak and crisscrossing canes (3) removing growth an inch below a canker; (4) removal of damaged, dead or broken canes back to healthy growth and (5) removing sucker growth as close as possible to main root. It is good practice to seal the ends of cut branches with white glue.

Floribundas are usually not pruned as severely as hybrid teas. Even so, be sure to remove any dead, broken, damaged or blotched branches back to where the pith or center of the cane is white and healthy looking. Next remove weak, spindly canes, canes growing toward the center of the bush, the weaker of two canes that crisscross, canes that grow out then up and suckers, if any.


## Helpful Hints

1. Practice good sanitation. Remove diseased and damaged foliage from the plant and on the ground as often as possible. This is particularly important in the late fall to minimize wintering over of diseases and harmful insects.
2. Do not plant roses in close proximity to large, surface rooted trees or shrubs.
3. Roses love water but not on the foliage. Water deeply no more than once each week with a soaker hose. Avoid planting roses within the range of lawn sprinkler systems that wet the foliage ferequently. Choose a location that provides good air circulation.
4. In late spring and early summer, hand pick any beetles that may appear. Use a spray of water to wash off aphids, especially in spring.
5. Plant hardy roses if care is timited. Shrub roses and specific varieties of other types of roses are excellent. See the Handbook for Selecting Roses from the American Rose Society, Shreveport, LA. Telephone (318) 9385402, E-mail: ars@ars-hq.org.
