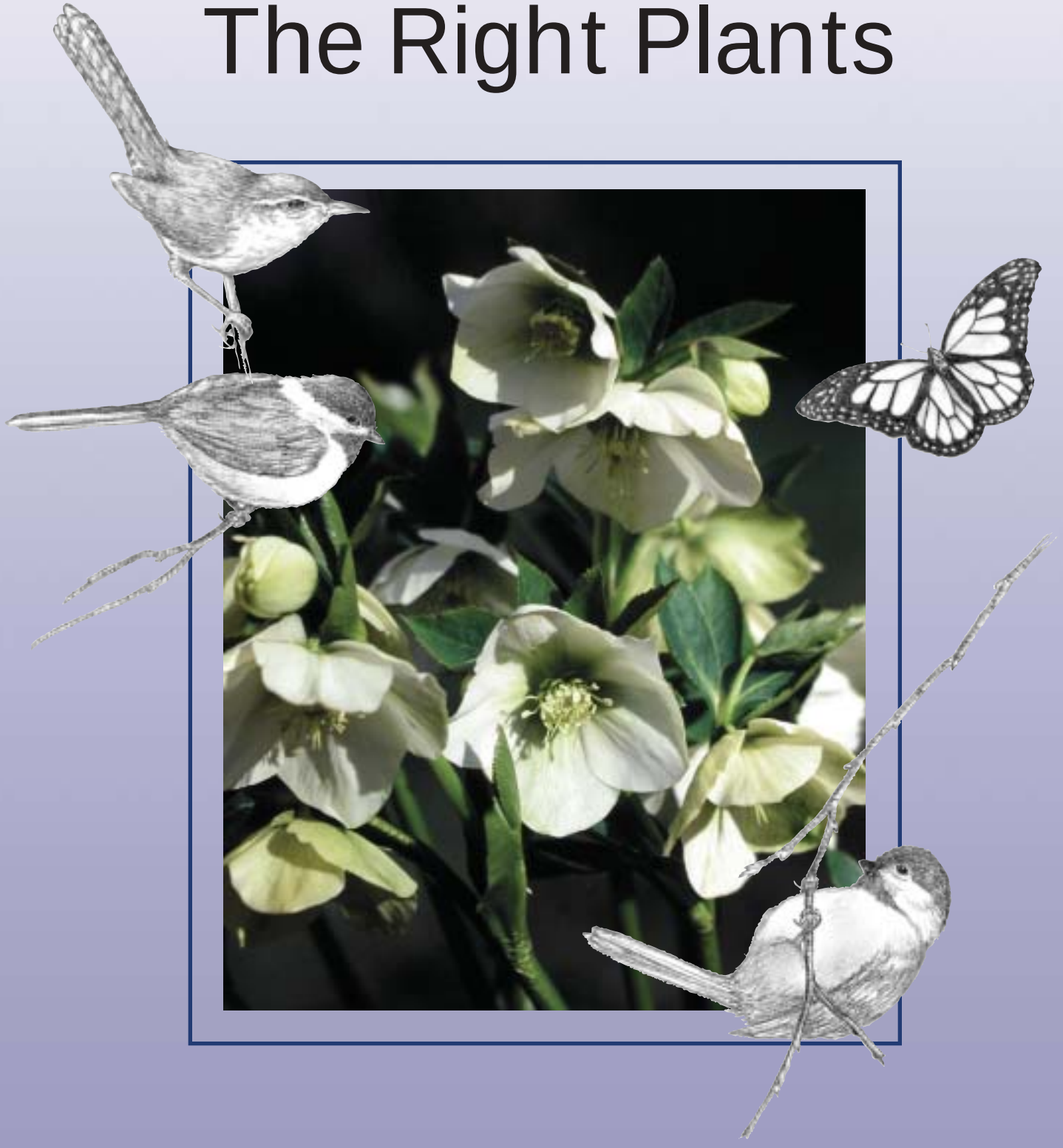
South Carolina Gardening & Recycling Organics Wisely

GROW

The Right Plants



Getting to Know Scientific Names

In this book, as well as in a number of gardening magazines and plant catalogs, you will find a botanical or scientific name associated with each plant. Although the scientific name may appear intimidating, it establishes the correct identity of the plant. These are three important points to keep in mind:

- A plant may have several common names that may differ from one region of our state to another.
- Sometimes, two unrelated plants may share the same common name.
- Fortunately, a plant can only have one scientific or "given" name.

The scientific name has two words, almost like our first and last names. Our last name identifies us generically as being a member of a particular group, such as Smith, Jones or Sabal. In plant talk, it is called the genus. Our first name specifically identifies us, such as John, Mary or palmetto. This is known as the species. When naming plants, we put the last name or genus first and the specifc or species name last. For example, it would be Smith, John and *Sabal palmetto* whose common name is cabbage palmetto, the state tree of South Carolina. The genus is always capitalized and the species name is written in lower case. Also, the scientific name is either italicized or underlined.

Plants may have a third name, which is the cultivar, a shortened word for "cultivated variety." When a plant is discovered to have a unique characteristic that differs from the species, such as different-colored flowers, shorter stature or colorful leaves, it is called a cultivar. The cultivar name is capitalized and is enclosed by single quotation marks. Sometimes the cultivar may be abbreviated to cv. And written this way: *Camellia japonica* cv. 'Dr. Tinsley' (Dr. Tinsley Japanese camellia).

Sometimes, the plant may have a third and fourth name, especially when several distinct forms occur. You will see words like varieties (var.), subspecies (subsp.) or forms (f.) written after the species.

In some cases the scientific name may not have a species, such as when a cultivar is a hybrid of two or more species. In that case, the genus name will be followed by the "cultivar."

Occasionally, you will find a trademark associated with a plant name. This marketing name is not a part of the scientific name; however, it can be confused with the cultivar name, especially when the cultivar is a nonsensical word in contrast to the more descriptive and appealing trademark name. For example, the scientific name of 'QVTIA' live oak is *Quercus virginiana* 'QVTIA.' Yes, believe it or not, the official cultivar name is 'QVTIA,' but its marketing name is Highrise.

Begonia tuberhybridacultorum

Scientific Names Give Clues

Although scientific names may be difficult to pronounce, they convey valuable and interesting information. The species names may give you a clue as to the geographic origin of the plant, such as live oak (*Quercus virginiana*), American elm (*Ulmus Americana*), Japanese andromeda (*Pieris japonica*), and Carolina buckthorn (*Rhamnus caroliniana*). Be careful, because these species names can be unreliable. For example, eastern redbud (*Cercis canadensis*) appears to be native to Canada, but it will not survive north of New Jersey.

Zinnia elegans

Honors a Contribution

Sometimes a scientific name honors the contributions of early botanists, plant explorers, or famous people. For example black-eyed Susan (*Rudbeckia hirta*) is named for Olaf Rudbeck, the mentor of Carolus Linnaeus, the Swedish "father of modern botany." The magnolia was named after Pierre Magnol, a professor of botany in France.

Hints About Shape, Size, Color or Fragrance

Sometimes the species name offers hints about shapes and sizes such as minor or small (periwinkle *Vinca minor*), ovata-oval or egg-shaped (mountain camellia *Stewartia ovata*) and macro or large (Dutchman's pipe *Aristolochia macrophylla*).

The growth form may be erectus or upright (stinking Benjamin *Trillium erectum*); scandens or climbing (climbing bleeding heart *Dicentra scandens*); and repens or creeping (trailing arbutus *Epigaea repens*).

The color may be alba or white (white oak *Quercus alba*) nigra or black (river birch *Betula nigra*), roseus or rose-colored (rose coreopsis *Coreopsis rosea*),fulvus or orange-gray-yellow (orange daylily *Hemerocallis fulva*).

A species may offer clues as to fragrance, (winter honeysuckle *Lonicera fragrantissima*), (sweet pea *Lathyrus odoratus*), and (bearsfoot hellebore *Helleborus foetidus* which sounds rather foul-smelling).

Is it evergreen or deciduous?

You can tell from its species name that possumhaw holly (*Ilex deciduas*) is deciduous or loses its leaves in the winter. Yellow jesamine (*Gelsemium sempervirens*), the state flower of South Carolina, is evergreen because its species name — *sempervirens* — means "always green."

Do not fret about being able to pronounce these scientific names properly. Chances are, the person you are speaking to may not feel very comfortable with the latin name either. As long as both of you use the same "plant language" with scientific names, you should be able to select the right plants for your landscape.

How To Select the Right Plants for a Beautiful, Trouble-free Garden

When you grow plants in the appropriate conditions, they thrive with minimal care. By choosing plants well-adapted to each garden situation, you save time and money, reduce maintenance, help prevent pests and diseases, and leave more clean water for the wildlife. Plan now and enjoy the benefits for years to come.

This guide takes you through the following simple steps for choosing plants that will flourish in your garden:

- **Step 1: Get to know your site.**
  Learn about the conditions in each part of your garden. Once you know your soils and microclimates—the areas in your landscape with unique climatic characteristics—you can choose plants that will thrive in each area.

- **Step 2: Dream a garden.**
  Decide how you want to use your landscape, and consider all the ways plants can help you create play areas, colorful flower displays, privacy or shade, wildlife habitat, food and more.

- **Step 3: Create a plan to fit your site.**
  Identify plants that will thrive with little maintenance in each situation, as well as providing the colors, scents, fruit or other qualities you desire.

- **Step 4: Give plants a good start.**
  Prepare your soil with compost, plant properly, mulch and follow healthy watering practices. For more information, see the "Growing Healthy Soils" and "Smart Watering" sections in this handbook.

Dry Sunny Garden

A few of the plants that thrive in these conditions include:

Beebalm
Monarda didyma
Black eyed Susan
Rudbeckia hirta
Butterflyweed
Asclepias tuberosa
Joe-pye weed
Eupatorium fistulosum
Purple coneflower
Echinacea purpurea
Stokes aster
Stokesia laevis
St. John's wort
Hypericum frondosum
Switch grass
Panicum virgatum
Yarrow
Achillea millefolium

Shady Woodland Garden

A few of the plants that thrive in these conditions include:

Bloodroot
Sanguinaria canadensis
Blue woodland phlox
Phlox divaricata
Fire pink
Silene virginica
Foam flower
Tiarella cordifolia
Green and gold
Chrysogonum virginianum
Indian pink
Spigelia marilandica
Jacks in-the-pulpit
Arisaema triplyllum
Maindenhair fern
Adiantum pedatum
Solomon's seal
Polygonatum biflorum

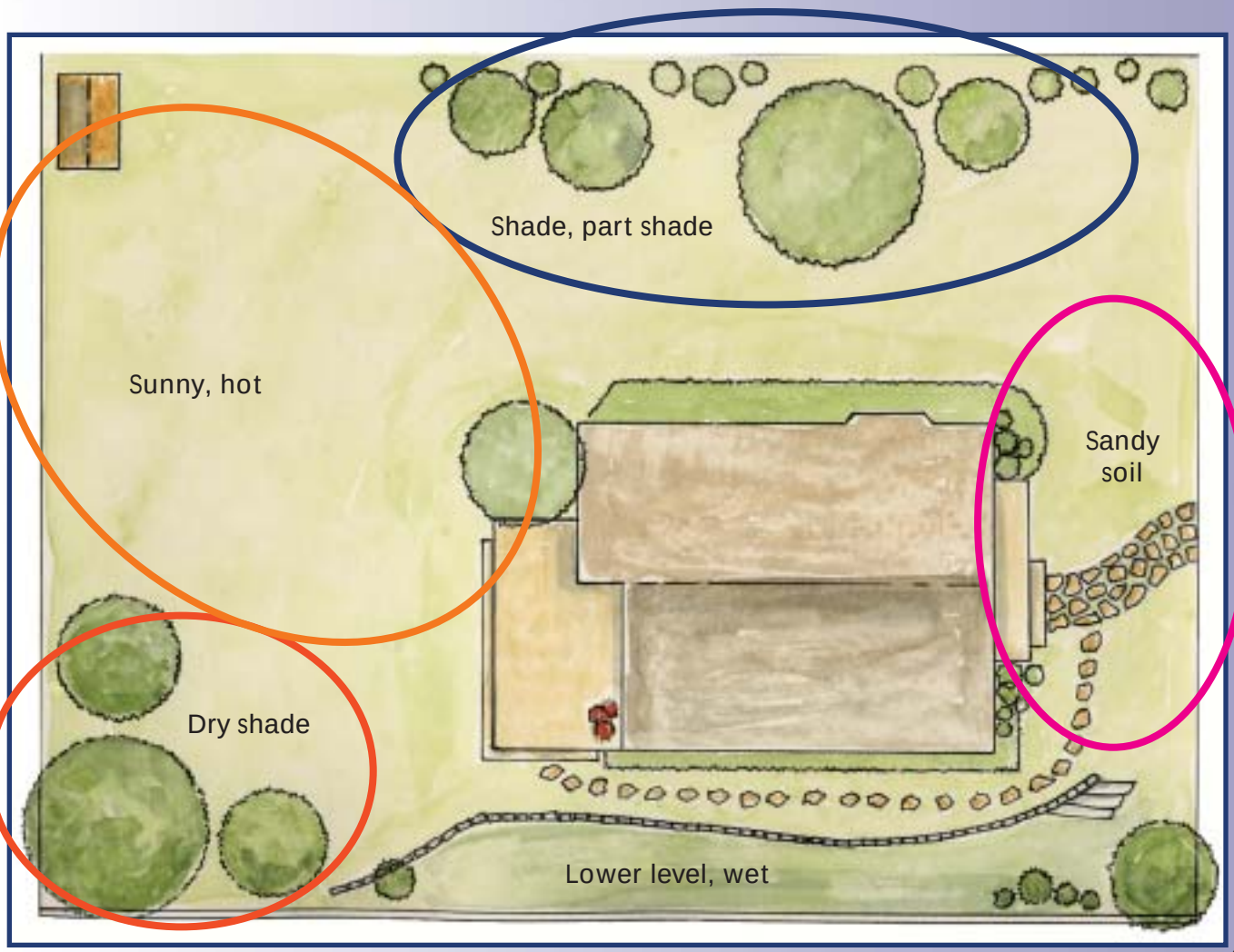
Step 1 Get to Know Your Site

First, make a simple map of your garden conditions. All it takes is a tape measure, shovel, graph paper and colored pencils. (Observing your existing landscape over the seasons can really pay off here and in step 2, Dream a Garden). After carefully measuring, create a drawing of your property to scale, showing all buildings, pavement, rockeries, trees, planting beds and other landscape features. Dig small holes about a foot deep in several spots around the yard to check soil type and identify problem situations such as compaction or poor drainage. Next, use colored pencils to outline the following microclimates and landscape conditions:

- Sunny, shady and partly sunny areas
- "Hot spots" on the south or west sides of walls or fences, or next to pavement
- Windy or exposed areas
- Areas with rocky or compacted soil that needs improvement
- Wet or poorly drained areas, runoff or draining downspouts
- Slopes that may erode or are difficult to mow
- Places that are hard to access for maintenance
- Dry spots under roof eaves or evergreens

Lawns and vegetables are picky!

Healthy lawns and vegetable gardens need well-drained soil at least six inches deep, and require several hours of direct sunlight per day. Many shrubs, trees and perennials will grow well in shady or wet spots, but lawns will have constant problems in these conditions. Few vegetables will produce well in shade or in poorly drained or shallow soil.



Step 2 Dream a Garden

Before choosing plants that will do well in your garden, think about what plants can do for you. Strategic landscaping can define outdoor spaces; attract wildlife, and provide privacy, play areas, food, colorful flowers and foliage, fragrant herbs and much more. Best of all, you can accomplish all of this with low-maintenance, waterwise plants. Decide how you want to use your garden and how much time you want to spend working in it. Look around your neighborhood for ideas and to the gardening books. Consider the following options when planning your landscape:

- Vegetable and herb gardens
- Flowers and colorful foliage
- Fruit trees
- Food, water and shelter for birds, butterflies and other wildlife
- Living screens for privacy
- Decks or paved areas for outdoor living
- Low-maintenance areas
- Wood-chip areas or lawn for play
- Views you want to accentuate or block
- Pathways necessary for home and garden maintenance
- Specific plants you want to keep, move or remove
- Garden storage and composting areas
- Potting and work areas
- Places for creating and displaying art
- Consider other needs:

Trees:
Environmental Heroes

Did you know that trees play a crucial role in our gardens and environment? They shelter and feed wildlife, cleanse the air, reduce storm runoff and prevent soil erosion. Deciduous trees planted on the south and west sides of a building provide summer shade, while letting sun through naked branches in the winter. Trees can also help block winter winds.

When planting trees on a suburban or city-sized lot, think small. Trees can grow quickly and shade out lawns or sun-loving plants. Falling limbs from large trees can damage structures and power lines.

Photograph courtesy Great Plant Picks

Acer palmatum 'Osakazuki'

Step 3 Create a Plan to Fit Your Site

Once you know your garden conditions and what you want your landscaping to accomplish, you can lay out your garden. Pair your site map from step 1 with your list of objectives from step 2 to define use areas and select plants for each location. For example, put your lawn and vegetable garden in sunny areas with good drainage. The bird and wildlife viewing sanctuary you've always wanted can go in the shady area, as can the compost pile. Use sheets of tracing paper laid over your site map to experiment with varied layouts, and match plants with the conditions that best suit them.

Create a Garden for All Seasons
Landscape for year-round interest!

- Look for winter standouts, including plants that feature varied leaf color or texture, and colorful winter bark or berries.
- Include evergreens. Use both coniferous and broadleaf evergreen plants to define spaces while keeping your garden green throughout the year.
- Provide winter structure. Woody trees and shrubs, as well as arbors, trellises and garden art, provide visual interest during the dormant season.

Choose the Right Plants for Each Spot

- Choose plants that thrive without irrigation. Many plants grow beautifully with just the water provided by nature — once they are established in your garden. Plant moisture-loving varieties where soil stays wet. Drought-tolerant plants perform best where soil is dry in the summer.
- Select pest-and disease-resistant varieties. Whether you grow roses or rhododendrons, apples or tomatoes, you will find that certain varieties resist common pests and diseases better than others. Look for these in nurseries and seed catalogs.
- Diversify your plant investments. Landscapes characterized by a rich array of plants resist the spread of pests and diseases better than gardens with little variety. Diverse plantings attract birds and insects that eat pests — and are more attractive to people, too.
- Why not go native? Indigenous plants have adapted to the local climate and pests. Many natives are beautiful and easy to grow. However, the needs of natives vary and, for best results, they must be grown in the right conditions—just like any other plant.
- Also refer to ***"Landscape Design for Energy Efficiency,"*** by Mary Taylor Haque, Lolly Tai and Don Ham.

Viburnum tinus "Spring Bouquet"

Photograph courtesy Great Plant Picks

Plan for Easy Maintenance and Efficient Irrigation

At every stage of laying out your garden, consider how to water wisely and make upkeep easy.

- Plant practical lawns. Include only as much lawn as you need and want to maintain. Remember that lawns need regular watering in summer to stay green, and need weekly mowing during several months of the year. Avoid planting lawn on slopes, narrow strips or irregular shapes that are hard to mow or irrigate.
- Create low-maintenance areas. Plant slopes, areas along fences and other hard-to-access sites with quick-growing ground cover plants that crowd out weeds and require little watering.
- Group plants by their water needs. This way, they can be watered by the same sprinkler or irrigation zone with each group receiving just the right amount of moisture. Lawns should be irrigated separately from other plants with different water needs.
- Create irrigation zones for each exposure. Plants in full sun usually use more water than those grown in the shade, and should be watered using different zones if you have an automatic irrigation system.
- Drip and soak for savings. Drip irrigation and soaker hoses provide the best way to water most plants other than lawns. They apply water directly to the soil, without wasting it on pavement or allowing water to evaporate as it sprays into the air.

Step 4 Give Plants a Good Start

Any plant you choose will grow best with good soil preparation, and proper planting and care. The following simple practices will help prevent many problems.

Build Healthy Soil

- Loosen soil at least 10 to 12 inches deep throughout planting beds, and six to eight inches deep in lawns. Use a shovel or digging fork, or a rototiller for large areas. Try a pick or mattock to break through compacted layers.
- Thoroughly mix compost into loosened soil throughout the planting bed when planting a new or remodeled garden area. When planting individual plants in the middle of a lawn or into an established planting bed, loosen the soil in an area at least three to four feet in diameter — larger for root balls measuring over a foot wide — but do not add soil amendments since this may prevent the plant's roots from spreading beyond the planting hole.

Plant Right

- Dig a hole large enough to spread the plant's roots.
- Form a firm mound at the bottom of the planting hole. Make it high enough so that the top of the root ball is at the soil surface, as it was in the pot or at the nursery.
- Loosen and spread the roots. Untangle circling or matted roots and spread them out around the plant, using a hose to gently spray soil off the outside of the root ball if needed.
- Fill in with the soil removed to make the planting hole. Firm soil with your hands, and water thoroughly. Check the level of the plant after watering has settled the soil.

Mulch and Water Wisely

- Spread mulch in a circle extending a little further out than the plant's branches. Mulch keeps roots moist, and makes soils loose and absorbent. Keep mulch a few inches away from the plant's trunk or stems.
- Water as needed until plants are established. Even most drought-tolerant plants need irrigation their first two or three summers. Once established, they can get by with little or no water in addition to what nature provides.