



## La Quinta at Barkley Ranch Estates

### 2013 Shrub and Tree Recommendations

The overall intent of La Quinta landscaping is to create visually attractive, healthy, safe, and water efficient plantings in the subdivision. By establishing an understanding of each plant's potential, protocols can be developed for the maintenance and care of them. The purpose of this booklet is to supplement this goal, and assist in the selection of desert adapted plants within La Quinta. Relevant information about size, growth rate, flower color, cold hardiness, exposure preferences are provided, as well as maintenance and water requirements for each plant and/or category. The listing of these proposed plant selection alternatives are to be considered when plants and trees within La Quinta are replaced.

Guidelines\* are also listed that describe the best practices for managing La Quinta trees and shrubs. Key pruning basics and tips that involve the restoration of older shrubbery are provided with the commitment of maintaining the landscape as functional, safe and with great visual appeal.

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\*Adapted from, Schuch, U.K. (2009). Pruning Shrubs in the Low and Mid-Elevation Deserts in Arizona.. <http://cals.arizona.edu/pubs/garden/az1499.pdf>

## Maintenance of Trees and Shrubs in La Quinta

### What is Pruning?

Pruning is the intentional removal of parts of a plant. Pruning needs of shrubs commonly planted in the low and mid-elevation deserts in Arizona vary from no pruning to regular seasonal pruning. Requirements vary by plant species, design intent, and placement in a landscape. Fast growing shrubs generally need frequent pruning from the time of establishment until maturity, while slow growing shrubs require little to none. Pruning should only be done when necessary and at the right time of year. Using the natural growth form of a shrub is a good guide for pruning. Shearing shrubs should be avoided except for maintenance of formal hedges or plant sculptures. All pruning should be done with sharp hand pruners or, for thicker stems, loppers.

### Why prune?

Reasons for pruning shrubs include maintenance of plant health, controlling plant size (for preventing obstruction of a view, sidewalk, or driveway), and rejuvenating old plants. Maintaining plant health includes the removal of diseased, dying, injured and dead branches. Stems that rub against each other should be removed. Control of shrub size for visibility and safety concerns is sometimes necessary. These can be minimized by allowing sufficient space for the plant to reach its mature size in the landscape. Renovating or rejuvenating old or overgrown

shrubs through pruning generally improves the structure and quality of the plant, and results in improved displays for flowering shrubs. Some shrubs are grown as formal hedges and require continuous pruning to maintain their size and shape.

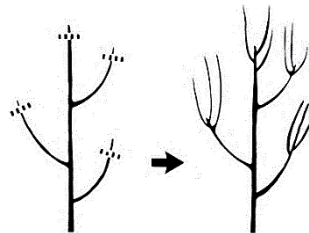
### Pruning Shrubs

**Selective thinning** of trees and shrubs refers to removing branches back to the point of attachment to another branch, or to the ground. This type of pruning opens the plant canopy, increasing light and air



movement. Thinning cuts do not stimulate excessive new growth. They serve to maintain the natural growth habit of the shrub. When light penetrates the canopy, entire branches can maintain leaves whereas in a dense canopy branches have leaves near the tip but are bare further back. Selective thinning is suitable for all plants and is generally the most desirable type of pruning cut.

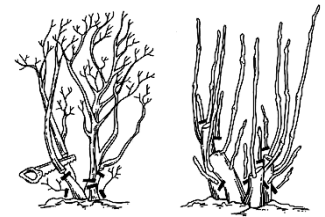
**Heading** of trees and shrubs to remove parts of a stem or branch results in multiple new shoots just below the cut. This can create a bushy plant and is



sometimes done when plants are very young to stimulate more branches. However, repeated heading is similar to shearing and eventually results

in a dense canopy with branches having leaves at the tip and no leaves further back. Heading cuts should only be used for formal hedges, for rejuvenation, or when a cluster of branches is desired. Stubs left by heading cuts will usually die back, unless cut just above a bud.

**Renovation** of older or overly large shrubs extends their life and improves their aesthetic value. One method is to cut all stems about 12-18 inches above the ground. This is a severe measure and changes the appearance drastically. However, when done in spring before bud burst, a great proliferation of stems will grow just below each cut by mid-summer. At that time, about half of the stems should be removed and the remaining ones should be cut back to different heights. Varying the height and cutting just above an outward pointing bud will stimulate growth of new

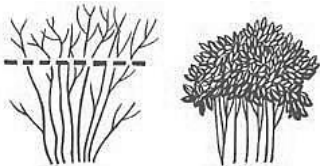


branches out of the canopy. This procedure works well for larger fast growing shrubs like Texas Ranger, and oleander and for slower growing shrubs like hop bush and creosote.

A less severe approach to rejuvenating shrubs is to remove half or more of the older unproductive branches at the base of the plant or those growing into the canopy. This thins out the plant to a much greater extent than regular maintenance pruning. Follow-

up care requires removing a portion of the new shoots a couple of weeks later, which might be too numerous and result in an overly dense canopy. The third method of rejuvenation spans three to four years and is less noticeable. About one third to a quarter of the oldest unproductive branches are removed each year. This method requires thinning excess branches and cutting back the remaining new branches as described before.

**Shearing** shrubs entails cutting back branches to a uniform surface. Shearing shrubs cuts the branches to stubs which results in a proliferation of new dense growth just behind the cut. There are several reasons why shearing is not recommended other than for



formal hedges. Shearing is labor intensive and requires repeat shearing to maintain the shape. It destroys the natural growth habit and gives shrubs an unnatural look. It is difficult to control the plant height since the new dense growth shades the inside of the canopy which can defoliate for lack of light. Subsequent cuts into the new growth will shear close to the surface, but over time the dimensions of the canopy will increase. Cutting into the older, bare wood by shearing results in a leafless shrub, limits the plants ability to produce their own food, and depletes their reserves to grow new leaves. This stresses the plant and can

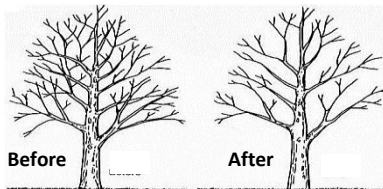
result in decline or death and removes flower buds, flowers, and reduces their beauty.

### Pruning Trees

Proper tree care is a mystery to some. However, proper tree care is important because trees are an investment in the value of our homes and the livability of La Quinta. Pruning trees is not recommended until after the tree has overcome transplant stress and has a self-supporting root system. Although pruning removes the energy source for trees (leaves), it is important to do it for three basic reasons: safety, tree health, and appearance. Safety is the most important reason, and pruning to remove existing hazards like dead, diseased, or dying branches and to prevent future ones like narrow branch angles or rubbing branches. The recommended cycle for residential homes and street trees is once every 4 to 6 years.

### Most Common Pruning Types:

**Crown Thinning** — Selectively removing small and weak branches on young trees throughout the crown. This promotes better form and health by increasing light penetration and air movement.



**Crown Reduction** — Removing larger branches at the top of the tree to reduce its height. When done properly, crown reduction pruning is different from topping because branches are removed immediately above

lateral branches, leaving no stubs. Crown reduction is the least desirable pruning practice. It should be done only when absolutely necessary.

**Topping** — The practice of indiscriminately removing a majority of a tree's branches. Topping violates most commonly accepted methods of proper pruning. Topping can create a more dangerous tree since branches that "sprout" after topping are weakly attached and as a result, they are more likely to break in a windstorm. By contrast, the positive effects of proper pruning will make trees healthier and extend their life.

### The Ten Pruning Commandments

1. Always have a reason to prune — if in doubt, don't take cut it out.
2. All pruning is done at a bud or branch regardless of whether you are shortening a branch or reducing height.
3. Prune to improve strength and safety. Reduce trunk and limb breakage by eliminating multiple trunks of equal size and narrow branch junctures that look like "V"s.
4. Prune to improve health by removing the dead, diseased, and dying branches and any branch where light or wind cannot penetrate.
5. Always maintain the upper two thirds of a tree in branches and foliage.
6. Never remove more than 25% of the canopy during one pruning cycle.
7. Never top a tree!
8. Never leave a stub or remove the branch collar by a flush cut.
9. Tree paint tree on wounds is not necessary for any other tree species except oaks.
10. Always disinfect pruning tools between trees to prevent the spread of disease.

## How much water do your plants need?

The trick is to give your plants enough water without giving them too much water. Why? Watering too little can lead to wilt from which the plant may not recover, but watering too much is bad for plants because it starves the roots of oxygen.

Depending on the size and type of the plant (tree, shrub, or groundcover), you will need to water to different depths and widths. A large tree needs more water than a small groundcover because it has a larger root zone—the area in which the plant's feeder roots are concentrated. Your plants will be healthiest if you completely wet the root zone each time you water.

### How Deep Should You Water?

The 1-2-3 Rule is an easy way to remember how deep to water:

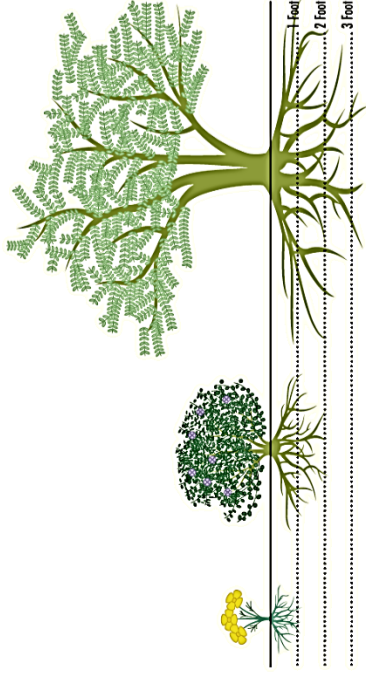
- Water small plants such as groundcovers, cacti, and annuals to a depth of 1 foot. (Grass should be watered to a depth of 10 inches.)
- Water medium plants such as shrubs to a depth of 2 feet.
- Water large plants such as trees to a depth of 3 feet.

A good way to test how deep you have watered is to use a soil probe—a sharpened piece of rebar or a very long screwdriver works well. About an hour after watering, push the probe into the soil. It will slide easily through wet soil but will be difficult or impossible to push through dry soil. Water your plants and lawn until you can easily slide the probe to the recommended depth.

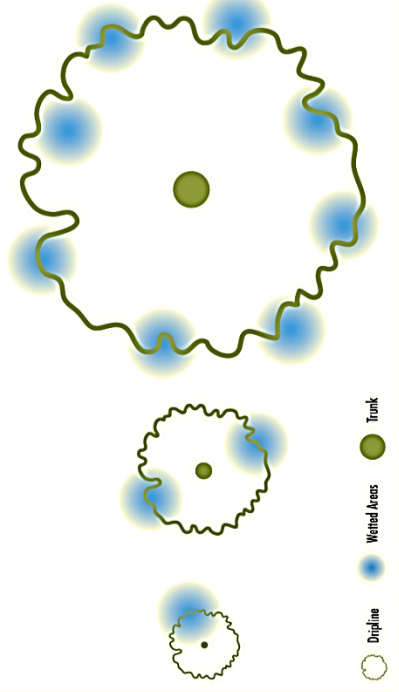
### How Wide Should You Water?

After plants are established (see page 14), most water absorbing roots are located near the dripline—which is beneath the outer edge of the plant's canopy—not close to the trunk or stem. Concentrate your emitters along the dripline of each plant. The water will spread down and horizontally as it soaks into the soil, reaching the entire root zone.

## Suggested Watering Depth for Different Types of Plants



## Place Emitters Along a Plant's Dripline



Reliable research-based data on landscape water needs is extremely limited. There simply are hundreds of plant species to evaluate and the scientific process requires a great deal of resources to identify water requirements of an individual species. While few information sources offer quantitative estimates of landscape plants' water requirements. However, most of those that do, including the widely-referenced publication by the Arizona Numbers publication by the Arizona Municipal Water Users Association. The Landscape Watering Guidelines is a good general reference.

## LANDSCAPE WATERING GUIDELINES

	How Much & How Often Water to the outer edge of the plant's canopy and to the depth indicated. Watering frequency will vary depending on season, plant type, weather and soil.	Seasonal Frequency — Days Between Waterings				Water This Deeply (Typical Root Depth)
		Spring Mar - May	Summer May - Oct	Fall Oct - Dec	Winter Dec - Mar	
<b>Trees</b>	Desert adapted	14-30 days	7-21 days	14-30 days	30-60 days	24-36 inches
	High water use	7-12 days	7-10 days	7-12 days	14-30 days	24-36 inches
<b>Shrubs</b>	Desert adapted	14-30 days	7-21 days	14-30 days	30-45 days	18-24 inches
	High water use	7-10 days	5-7 days	7-10 days	10-14 days	18-24 inches
<b>Groundcovers &amp; Vines</b>	Desert adapted	14-30 days	7-21 days	14-30 days	21-45 days	8-12 inches
	High water use	7-10 days	2-5 days	7-10 days	10-14 days	8-12 inches
<b>Cacti and Succulents</b>		21-45 days	14-30 days	21-45 days	if needed	8-12 inches
<b>Annuals</b>		3-7 days	2-5 days	3-7 days	5-10 days	8-12 inches
<b>Warm Season Grass</b>		4-14 days	3-6 days	6-21 days	15-30 days	6-10 inches
<b>Cool Season Grass</b>		3-7 days	none	3-10 days	7-14 days	6-10 inches

These guidelines are for established plants (1 year for shrubs, 3 years for trees). Additional water is needed for new plantings or unusually hot or dry weather. Less water is needed during cool or rainy weather. Drip run times are typically 2 hours or more for each watering.

## Salvaging Sheared Plants

Restoration and renovation pruning can be applied to all plants, but some will also respond to radical pruning

Common Name	Plant Name	Season to Treat	Radical Pruning	Restoration
Anacacho-orchid Tree	<i>Bauhinia lunarioides</i>	late winter		Gradual selective thinning
Arizona Rosewood	<i>Vauquelinia californica</i>	late spring		Gradual selective thinning
Autumn Sage	<i>Salvia greggii</i>	late spring	cut back to base	
Baja Fairy Duster, Red Fairy Duster	<i>Calliandra californica</i>	late spring	cut back to 6-8"	To restore natural form, cut selected stems back to base
Bee Brush, Whitebrush	<i>Aloysia gratissima (A. lycioides)</i>	late winter	cut back to 1'	
Black Dalea	<i>Dalea frutescens</i>	late winter, early spring	cut back to 6-8"	
Blue Mist	<i>Caryopteris x clandonensis 'Dark Knight'</i>	winter	cut back to 4"	
Bougainvillea	<i>Bougainvillea sp.</i>	late winter	cut back to 6-8"	
Brittlebush	<i>Encelia farinosa</i>	late spring	cut to ground	
Broom Snakeweed	<i>Gutierrezia sarothrae</i>	late spring or late fall	cut back to 4"	
Fire Lantana	<i>Lantana camara</i>	late winter, early spring	cut back to ground	
Bush Morning Glory	<i>Convolvulus cneorum</i>	late spring		Cut back to 1/2 size
Chamisa, Rubber Rabbitbrush	<i>Ericameria or Chrysothamnus nauseosus</i>	late spring	cut back to 6-8"	
Chaparral Sage	<i>Salvia clevelandii</i>	late summer, early fall	cut back to 6-8"	
Chaste Tree, Monk's Pepper Tree	<i>Vitex agnus-castus</i>	late winter	cut back to 8-12"	Gradual selective thinning (for tree form)
Chuparosa	<i>Justicia californica</i>	late spring	cut to ground	
Creosote	<i>Larrea tridentata</i>	winter	cut back to 8-12"	
Damianita	<i>Chrysactinia mexicana</i>	late spring		Cut back to 1/2 size
Desert Broom	<i>Baccharis sarothroides</i>	fall to spring	cut to ground	
Desert Milkweed	<i>Asclepias subulata</i>	late winter to spring	cut stems to base	
Desert Ruellia	<i>Ruellia peninsularis</i>	late winter, early spring	cut back to 6-8"	
Desert Saltbush	<i>Atriplex polycarpa</i>	late winter	cut back to 6-8"	
Desert Spoons	<i>Dasyliiron spp.</i>			Let new growth hide sheared leaves
Desert-honeysuckle	<i>Anisacanthus thurberi</i>	late winter	cut back to 1/2 size	
Desert-lavender	<i>Hyptis emoryi</i>	late fall or late spring	cut back to 6-8"	
Fire Bush, Firecracker Bush	<i>Hamelia patens</i>	late winter, early spring	cut back to 4-6"	
Four-winged Saltbush	<i>Atriplex canescens</i>	late winter	cut back to 6-8"	
Germander	<i>Teucrium chamaedrys</i>	late spring or fall, winter	cut stems to base	
Globemallow	<i>Sphaeralcea ambigua</i>	late spring	cut back to 4-6"	
Goldeneye	<i>Viguiera parishii (V. deltoidea)</i>	late fall, winter	cut back to 6"	
Hopbush	<i>Dodonaea viscosa</i>	late fall to spring	cut back to 8-12"	
Indian-mallow, Supersition-mallow	<i>Abutilon palmeri</i>	late winter	cut back to 8"	
Jobba	<i>Simmondsia chinensis</i>	late spring or late fall	cut back to 12"	
Littleleaf Cordia	<i>Cordia parvifolia</i>	late winter	cut back to 6-8"	
Mexican Bush Sage	<i>Salvia leucantha</i>	late winter, early spring	cut to ground	