

# ARIZONA'S WATER RESOURCES

Groundwater is considered a non-renewable source of fresh water since pumping exceeds recharge in most aquifers used as sources of fresh water. Surface sources of fresh water, such as lakes and rivers, are considered renewable. It is generally agreed that the total amount of water that circulates annually (from the earth's surface to the atmosphere and back down to the earth) has remained fairly constant in recent times. Therefore, on average, rivers and lakes produce the same amount of fresh water now as they did 100 years ago. However, the population of the world has increased more than six-fold in the last 100 years, adding demands on fresh water resources. In Mohave County and the State of Arizona, we must all contribute to the wise management and use of local water resources for continued growth and preservation of life and the environment. (Arizona Know Your Water, University of Arizona 2004)

## About this Publication

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A Special Gratitude is given to our Mohave County Master Gardeners and Horticulture professionals who devoted much of their knowledge and time putting together the information.

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Visit our WATERWISE Communities website at <http://cals.arizona.edu/mohave/water/> or email us at [mohavece@cals.arizona.edu](mailto:mohavece@cals.arizona.edu)

**Mohave County**



**Water Wise Communities**

**ARIZONA COOPERATIVE  
EXTENSION  
Mohave County**



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# Low-Water Tree and Plant Guide



**Water Wise Communities**

**Landscape Plants for the Mohave County  
Bullhead City and Lake Havasu City Regions**

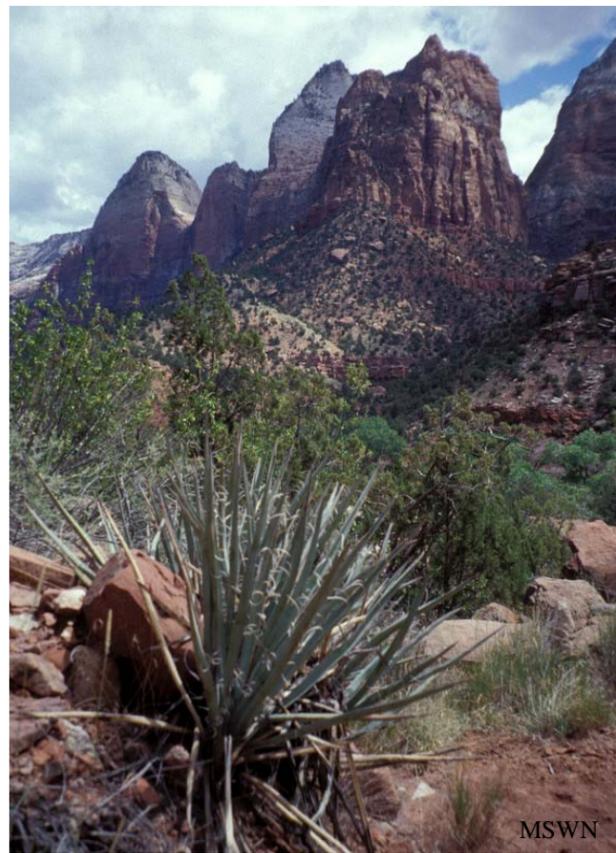
## Lower Colorado River Landscapes and Water Wisdom

Due to normal drought conditions, many homeowners are deeply concerned with how much water is needed to support their landscapes. As the population swells and the demand for water increases, it is important for residents within Mohave County to find landscape alternatives to help save water and reduce their utility costs.

The amount of water that a plant needs is conditional to the rainfall that an area receives. Mohave County has rainfall that varies between 4 and 14 inches per year. A low-water use plant is defined based upon the relative amount of additional water given to a plant, beyond the necessity of receiving the annual rainfall. Simply stated, most low-water plants will survive on the natural rainfall of the area, but low quantities of additional water may enhance the beauty of your landscape to its' fullest potential, without placing a burden on our water supply. Please remember the old saying that "plants don't save water, people do."

When planning your low-water landscape, bear in mind the water saving conveniences (Rainwater harvest, drip-line disposal and grey water reuse) that should be integrated with our irrigation systems. Additional information is available through this guide and other resources are available through the Mohave County Cooperative Extension office. Bullhead homeowners quickly learn how our arid desert climate, strong winds, freezing winters and hot summer temperatures create our many landscape challenges. Selecting the right plant will help you with creating a beautiful and lasting landscape that will require less maintenance and water.

The plants featured in these pages were researched and selected by members of the Bullhead area Master Gardener program and regional landscape professionals. All of these plants were chosen based upon their commercial availability, survivability, esthetics and low-water use.



MSWN

### How this book is organized

Plants are listed alphabetically by their common name. Each plant also lists the biological name that may be needed to distinguish the plant when purchasing.

### Gardening Basics:

**Hardiness**—The temperature refers to the lowest temperature in Fahrenheit that the plant is known to tolerate before serious injury or death. The hardiness can vary with the plant's age, health, location within the yard and the duration of the cold temperatures.

### Exposure to the Sun

**Full Sun**— This means that a plant can tolerate 8 or more hours of sun each day.

**Reflective Sun**—This indicates the toughest plants that can tolerate extreme light and heat conditions, generally seen against a south or west wall.

**Partial Sun**— This indicates that the plants do best with a moderate amount of sun. Position these plants so they get the morning sun a partially shaded in the afternoon.

**Shade**— This means that a plant does best with minimum exposure to the sun. Exposures that face north, beneath trees or next to buildings are some examples.

### Growth:

**Rate** - This is a general guide to how quickly a plant will grow under normal growing conditions.

**Size** – The first number represents a mature plants height. The second number represents its' width.

### Foliage:

"E" indicates evergreen. An Evergreen plant retains their leaves all year, although there will be leaves that will fall from growth and maturity.

"D" indicates deciduous. Deciduous plants drop their leaves during the dormant winter season.

"SE" indicates semi-evergreen. These plants drop their leaves for a short period with sufficient winter cold. Some foliage has additional description with leaf shape and color.

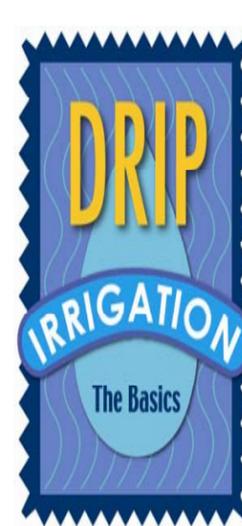
### Flowers:

**Color**: This refers to the overall color of the flower color

**Season**: This refers to the season of when to expect the flower to bloom.

### Comments:

These are general comments special to the plant.



**D**rip irrigation—also known as low-flow, micro, and trickle irrigation—is the slow, measured application of water through devices called emitters. Drip irrigation was invented in the early 1960's as an efficient way to water agricultural crops. Now, a wide variety of quality products has been developed to make drip irrigation reliable and easy to use for almost any landscape situation.

**Why should I use drip irrigation?** Drip irrigation saves water because little is lost to runoff or evaporation. This watering method also promotes healthy plant growth, controls weed growth, and reduces pest problems.

**What types of landscapes are best suited for drip irrigation?** Almost any part of your landscape can be watered with drip irrigation. Drip systems are particularly well suited for desert landscapes, places where runoff can be a problem, and small, narrow areas such as entryways. Drip is also a great way to water garden vegetables and potted plants.

**Can I design my own drip irrigation system?** **YES!** Designing your own drip irrigation system is not difficult to do, but it does require some careful planning. Make a drawing of the final installation design of your system, and keep it for your records

## What Are the Components of a Drip Irrigation ? System?



**CONTROLLER/ TIMER:** Controls the watering cycle by automatically activating the control valves on the pre-selected days and times, thereby directing when, how long and how often the system operates.



**BACKFLOW PREVENTOR:** This device prevents the irrigation system water from being siphoned back into drinking water. Your water provider may regulate the installation of backflow preventors. Contact them for more information.



**VALVES:** Manually or automatically operated control valves are used to turn the water on and off. Automatic control valves are wired to a controller.



**FILTER:** All drip systems need some type of filter to keep dirt and debris from clogging the emitters.



**PRESSURE REGULATOR:** Most drip systems operate at low pressure, usually less than 20 PSI. Pressure regulators reduce incoming water pressure to the ideal pressure for the drip system.



**PIPE:** Polyethylene tubing and rigid PVC are the two most commonly used types of pipe.



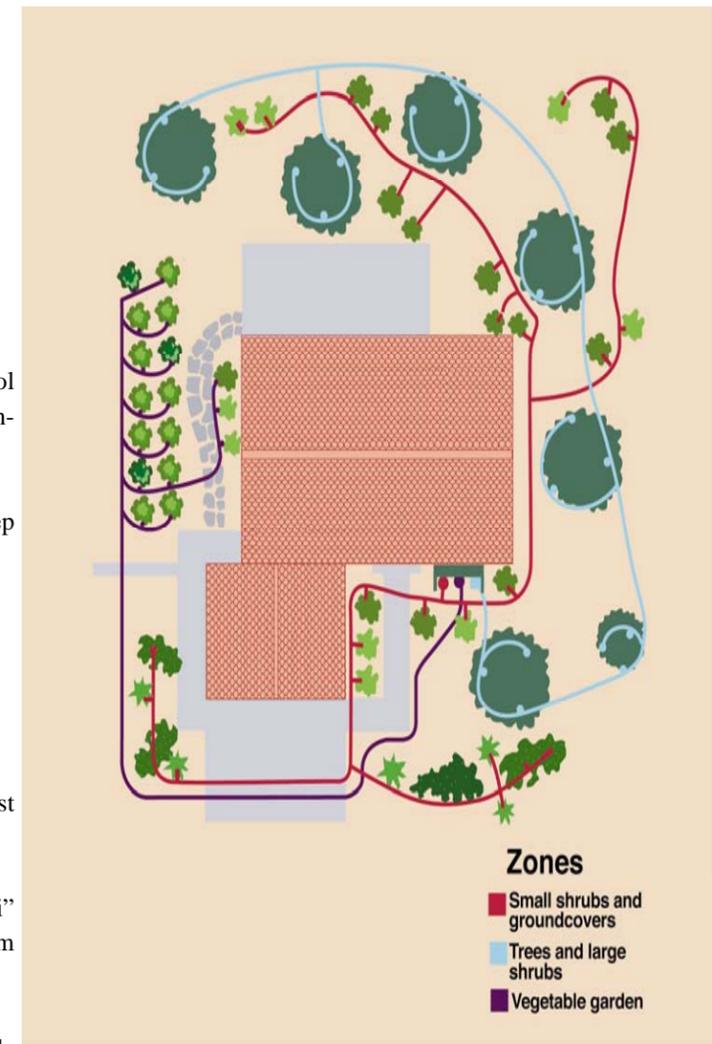
**MICRO-TUBING:** Also known as "1/4 inch" or "spaghetti" tubing delivers water from the emitters to the plants, or from the poly tubing to the emitter.



**EMITTERS:** These connect to the tubing or can be inside the tubing and deliver water at a slow, consistent rate, usually, 0.5, 1, 2 or 4 gallons per hour.



**FLUSH VALVE/ CAP:** A flush cap is attached to the end of each irrigation line so that dirt and debris can be flushed out of the irrigation system.



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# Watering Trees and Shrubs

## Simple Techniques for Efficient Landscape Watering

**Plants don't waste water—people do!** How much water do trees and shrubs really need? How often should they be watered? Where should it be applied? Most people over water plants. Over-watering can damage or even kill plants, leaving you with high water bills. Learning to water efficiently and effectively is easy. This brochure provides some basic guidelines on how to properly water trees and shrubs.

**Where should I water?** The soil surrounding the plant's roots, called the "root zone," serves as a storage tank from which the plant draws moisture and nutrients. Most trees and shrubs shed rain water to the "drip line," much like an umbrella. The most active water absorption area is at the drip line and beyond, not close to the trunk. This is where you should water. Most of the roots spread 1 1/2 to 4 times as wide as the plant's canopy.

### How should I water?

**Drip Systems**—Most drip systems do not have enough well placed and spaced emitters. Add emitters and increase the area watered as the plants grow.

**Bubblers**—Be sure the basins are level and extend beyond the edge of the canopy. Avoid watering near the trunk.

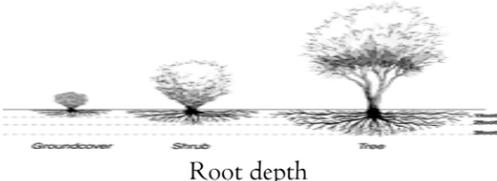
**Soaker Hoses**—A perforated hose made from recycled tires is a good device for watering, but can emit water in a random pattern.

**Sprinklers**—A spray fixture can cover a large turf area but can be **inefficient** because of wind and evaporation. Use other methods that direct watering to the root zone more efficiently when able to conserve water.

**How much should I water?** Be sure to water the root zone to the indicated root depth every time you water (see table below). How will you know this? Push a "soil probe," a smooth rod (1/4 to 3/8" diameter), into the ground soon after you irrigate. The soil probe should easily slide through the wet soil and become difficult to push when reaching dry soil. Watering deeper than the root zone only means you are wasting water.

**How often should I water?** Water consumption rates vary greatly among plant species. High water use plants like cottonwood and willow trees that grow naturally along water ways, need much more water than established arid region plants. A good rule of thumb is to water when your soil probe won't penetrate the ground more than 3 to 4 inches.

**How long should I water?** The amount of time needed to sufficiently water your plants depends on how much water your irrigation system delivers, root zone depth, weather, and type of soil. Monitor how quickly the water soaks into the soil using a soil probe. Remember, you want water to reach the full depth of your plant's root zone, but no deeper. Once you have determined how long it takes to fill the root zone, try to irrigate the same amount of time when watering.

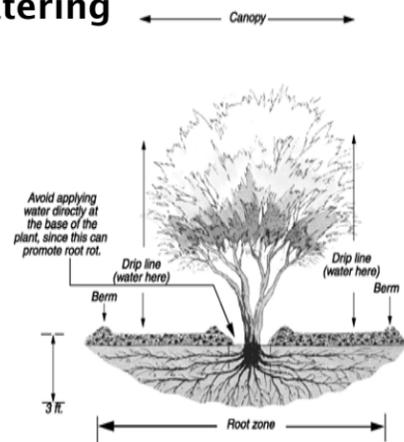


Root depth has a major impact on how often plants need water. Deeper rooted plants need less frequent watering. Encourage a deep, drought-resistant root zone by watering deeply and infrequently.

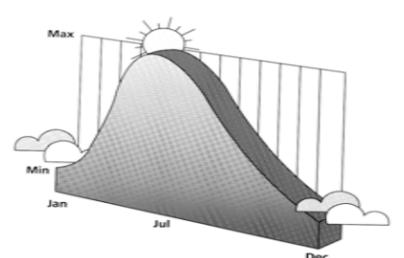
Typical Root Zone Depth for Mature Plants	
Lawn and Garden	6 - 12"
Shrubs	12 - 24"
Trees	18 - 36"

### Tips for efficient watering

1. Control weeds. Do not lay black or clear plastic over the soil. Use mulch or landscaping fabric instead to allow water and air to circulate in the root zone.
2. Avoid spraying tree and shrub leaves with water. Salts in the water can damage the foliage.
3. If trees or shrubs are planted in turf, water them separately at the drip line.
4. Once or twice a year water three times longer than normal to help leach salts out of the root zone.
5. Prevent runoff by retaining water in a basin around the plant or water at a slower rate.
6. Watering in the early morning will be most efficient because of less wind and heat. Use rainwater when possible.



"If trees are in a lawn, water the trees separately from the grass. Deep watering promotes deep rooting of trees and shrubs. If not, tree roots may grow on the soil surface."



**Weather** Plants use 3 to 5 times as much water during the hot, dry, windy summer as they do during the winter. Adjust your watering schedule with the season and when there are significant changes in the weather.

**Summer**—Generally you should water mature trees and shrubs no more than once a week. Water arid adapted plants less often, if at all.

**Winter**—If there has not been any precipitation for four to six weeks, water deciduous and evergreen trees and shrubs to keep the root zone moist.

**Plant Maturity and Type** To prevent wilting, young plants should be watered more often than older plants. After they become established, in one or two-years, allow a slight drought between watering. The plants will adapt to the stress and become more drought tolerant.

**Soil Type** If your soil is shallow, compacted or sandy, irrigate more often but for less time. Clay soil can hold water more tightly.

**Mulch** Keeping water from evaporating is key to keeping water in the ground for plant use. A 3 to 4" layer of an organic or inorganic (rock) mulch on top of a plant's root zone will significantly reduce the frequency of watering.

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## Landscape Water Conservation Basics

Low water or water-efficient landscaping is often called **Xeriscaping**. The term refers to plants that are appropriate for the local climate and care is given to prevent loss of water through evaporation or run-off. Minimize the turf or lawn area to maximize your water requirements. Xeriscaping will:

- Lower water bills
- Require less time and maintenance
- Increase habitat for native bees, butterflies and other wildlife
- Tend to survive better if water restrictions are implemented within your area.

**Soil Improvements:** The foundation of water conservation in the landscape lies in creating soils that optimize the water availability within the soil. With native plants, soil amendments are not required if the area of where the planting will be done is within the naturally occurring topsoil. If the area that you are planting is within a sub-soil horizon (topsoil has been removed during preparation), then some soil preparation and added amendments may be necessary. Amendments may include the addition of 2-3 inches of organic matter that is mixed into the soil to at least 6-inches below and above grade.

**Initial Planning and Design:** Making the transition to a successful Xeriscape landscape usually requires good planning. You should start with an idea of where you would like to locate your landscape plants and then draw it on a piece of paper for spatial and recording purposes. Draw a picture of your landscape to an appropriate scale and include as much detail as possible. Include the location of the house, garage, sheds, fences and each tree, shrub or plant. Label all the trees and shrubs simply as deciduous or evergreen to show litter and shade qualities. Be sure to locate any future areas that will affect the landscape.

**Planting a New Water Efficient Landscape:** In general within desert, the fall and early spring are the best time to plant tree's, shrubs and flowers. While planting can be done at other times of the year, it is more challenging to establish a plant in the heat of the summer or late in season when the roots have less time to establish. Always consider the full-grown size of a given tree or shrub. Be sure you are not planting tall or wide trees on street corners where viewing traffic is important or underneath power lines where they may someday have to be severely pruned or removed. Plant trees and shrubs in space appropriate areas.

**Watering:** How much and when you water have a lot to do with water conservation. By watering in the hotter part of the mid-day, you may lose a significant amount of water to evaporation and even wind. Those with automated spray water systems should use and set their system to come on at night or early morning. It is beneficial to water all landscape plants at the root zone using drip line technology. Drip irrigation uses less water because it applies the water to the root zone of the plant, eliminating all run-off and evaporation. When planting all plants, consider the topography and locate the plants *below* final grade in basins. If planting on a slope, consider creating a dam on the low side of the slope to catch any run-off rainwater. Try to retain as much rainwater as possible on your property. Add mulch around the tree or shrub to help hold the water.

Even the most drought tolerant plants require some regular water in the first year or two. The eight weeks after planting, the plant will require watering every 2-7 days during the hot summer months and every 4-14 days during the cool winter months, depending on the water depth within the soil. Gradually extend the time between watering until the plants are established. Establishment usually takes one year for small plants, two years for large shrubs and three years for trees.

**Use of Mulches:** One of the most effective ways to reduce soil evaporation is to apply a layer of mulch. Even if there isn't much moisture in the ground, a 3-inch layer of organic (bark, straw, hay) or inorganic rock on top of the soil over the root zone of the plant will help keep roots cool and hold moisture in the ground. Use shade cloths to help them from transpiring too much water during the day.

# Trees

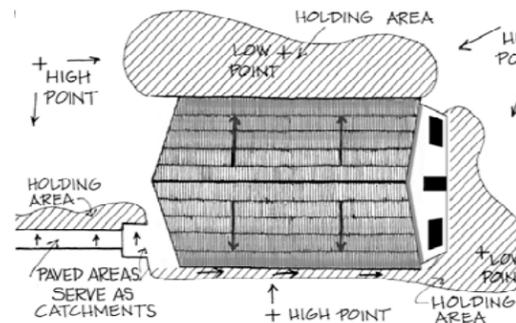


Common Name Botanical Name	Gardening Basics Hardiness Sun	Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
African Sumac <i>Rhus lancea</i>	20°	Slow 20'x20'	E Light green compound leaves	Yellow inconspicuous Early Summer	Willowy, good shade, heat tolerant, sensitive to deep frost
Argentine Mesquite <i>Prosopis alba</i>	20°	Fast 20'x20'	SE	White-Yellow	Single trunk, dense crown, thorns, allergenic
Arizona Rosewood <i>Vauquelinia californica</i>	-10°	Slow 15'x15'	E Glossy-green	White clusters Spring	Narrow glossy-green oleander-like leaves, will tolerate drought, no maintenance
Bottle Tree <i>Brachychiton populneus</i>	15°	Fast 40'x30'	E	White Late Spring	Fresh green leaves year-round, foliage "quakes" like Aspen leaves, good windbreak, shade Develops hard-woody pod, messy.
California Fan Palm <i>Washingtonia filifera</i>	15	Moderate 50'x20'	E	None	Thicker trunk than Mexican Fan Palm, will hybridize with Mexican Fan Palm
Carob Tree <i>Ceratonia siliqua</i>	25°	Fast 30'x30'	E Dense, dark-green foliage	Red, small Spring	Often multi-trunked frost sensitive, female trees flower, male produce pods used as coco substitute, Shade tree,
Cascalote <i>Caesalpinia cocalaco</i>	20°	Slow-Moderate 15'x15'	E	Showy yellow spikes Winter-Spring	Bright green foliage, medium thorns (some varieties thorn less), winter flowers & colorful seed pods, vased-shaped, low litter
Chaste Tree Monk's Pepper <i>Vitex agnus-castus</i>	-10°	Moderate 20'x20'	D	Lavender-white and rose colored spikes Spring-Fall	Fragrant flowers, large palmate green leaves with spicy fragrance, multi-trunked, seed may be hazardous on sidewalks. Late to come out. Takes heat.
Chilean Mesquite <i>Prosopis chilensis</i>	15°	Fast 30'x30'	SE	White -yellow-green	Multi-trunked, some thorns, limit water to control growth & uprooting, far-reaching roots, seasonal litter
Chinese Elm <i>Ulmus parvifolia</i>	10°	Fast 40'x50'	SE Leathery dark green leaves	Inconspicuous	Attractive bark, seasonal litter, foliage may turn red or purple in fall, good shade
Chinese Pistache <i>Pistacia chinensis</i>	-20°	Slow 30'x25'	D Dark green glossy leaves	Green, inconspicuous Spring	Dense shade, fall color, red fruit on females, accepts alkali soil & varying water. Seasonal litter
Coolibah <i>Eucalyptus microtheca</i>	10°	Fast 35'x25'	E Blue-green ribbon-like leaves	Cream, inconspicuous Summer	Accepts lawn conditions, wind resistant, low litter

## HARVESTING RAINWATER

Harvesting rainwater can reduce the demand use of purified drinking water for landscape irrigation. It is an effective water conservation tool and proves most beneficial when accompanied with the use of native, low-water and desert adapted plants. Rainwater provides sulfur and nitrogen which is a beneficial as a fertilizer to plant growth. Additionally, rainwater is available free of charge and puts no added strain on the municipal water supply or a private water system.

Mohave County is a very arid region where rain showers are scarce and widely scattered when they occur. The annual precipitation ranges from 3-6 inches along the Colorado River cities to 8-12 inches within the higher desert areas. Approximately half of the annual rain falls in the winter and the remainder may fall within the summer monsoons. Many native plants can survive on annual rainfall alone when mature, but will require regular watering during the first couple of years after transplant. By harvesting your rainwater, you can supplement or enhance your watering needs by applying a few tips from this guide. Whatever your landscape watering needs maybe, your landscape will benefit in beauty with very little maintenance and the unwanted costs associated with irrigation using fresh potable drinking water.

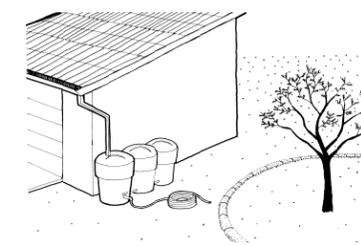
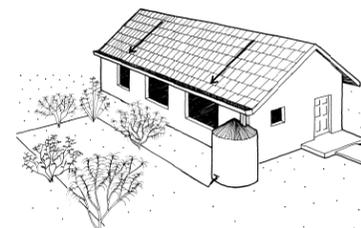


By observing your landscape during a rain, you can locate the existing drainage patterns on your site and identify low points and high points. Utilize these drainage patterns and gravity flow to move water from catchment areas to planted areas. Take advantage of existing sloped paving such as walkways and patios to catch water and redistribute it to planted areas. If you are harvesting rainwater from the roof, extend downspouts to reach planted areas or provide a drainage path to move the water where it is needed.

A simple system usually consists of a catchment area and a means of distribution, which operates by gravity. The water is deposited in a landscape holding area, a concave area or planted area with "edges" to retain water, where it can be used immediately by the plants. A good example of a simple system is water dripping from the edge of a roof to a planted area or a diversion channel using roof guttering as shown. Gravity moves the water to where it can be used. In some cases, small containers are used to hold water for later use.



**You can harvest approximately 600 gallons of water on a 1,000 square foot roof during a 1" rain storm**  
**Contact your local hardware store for simple and inexpensive materials to be used in your water harvesting project**



Benefits to Harvesting rainwater for use within your landscape:

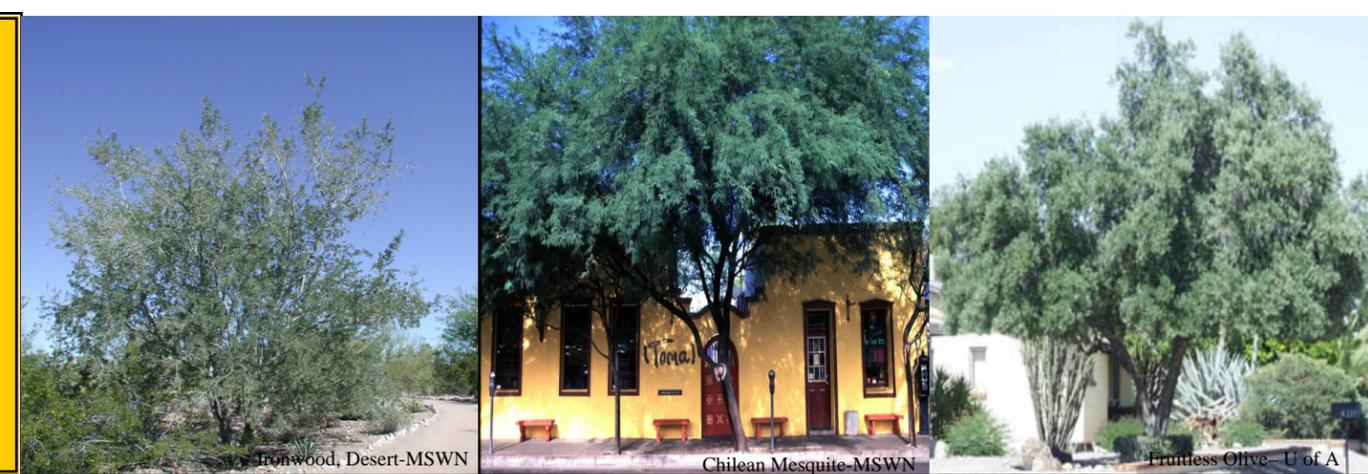
- Water harvesting not only reduces potable water use and related costs, but also reduces off-site flooding and erosion by holding rainwater on-site.
- Rainwater is a clean, salt-free source of water for plants.
- Rainwater harvesting can reduce salt accumulation naturally occurring in the soil and from your tap water which can be harmful to root growth. Rainwater is naturally distilled through evaporation and is one of the purest sources of water. When rainwater is used in mineral soils, the rainwater will force the salts down and away from the root zone area. This allows for greater root growth and water uptake which increases the drought tolerance of the plants.
- Rainwater comes to us free of charge! Instead of diverting your rainwater out into the street or alley way, PLANT your rainwater into your landscape and watch it grow!

# Cacti



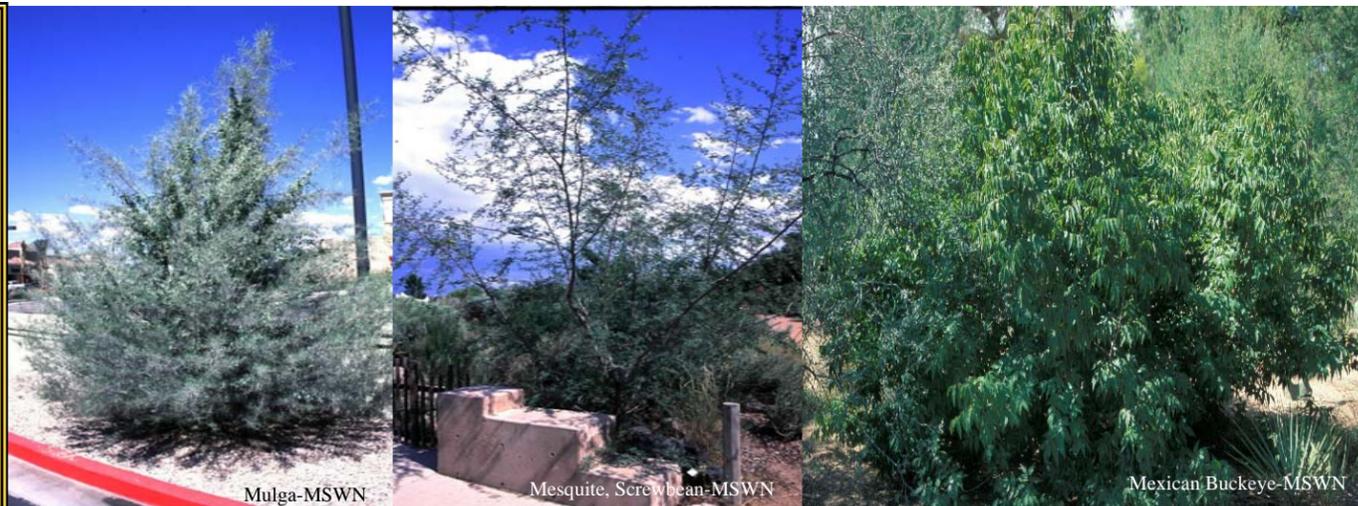
Common Name <i>Botanical Name</i>	Gardening Basics Hardiness Sun	Growth Rate and Size	Foliage Color	Flowers Color & Season	Comments
Organ Pipe <i>Stenocereus thurberi</i>	25°	Up to 23" tall Columnar	Dk. Green Multiple ribs	Lavender white clusters May-July	Blooms At night Native to Mexico
Mexican Fencepost <i>Pachycereus marginatus</i>	25°	10' x 6' Columnar	Dk. Green with white spikes	Pink Spring	Good in containers. A dramatic accent
Prickly Pear <i>Opuntia var.</i>	10°	Moderate-Slow To 4'	Green cylindrical with conspicuous tuber- cles	Greenish yellow streaked with red	Jointed segments and can be prorogated at joint. Spreading up- right
Saguaro <i>Carnegiea gigantea</i>	20°	Slow 20' x 10' Columnar	Green Vertically ribbed clusters of stout spines	White showy on top Late Spring	Red fruit. Enjoyed by birds.
Senita aka Wiskers <i>Pachycereus schottii</i>	15°	10' x 10' Columnar		Pink Blooms at night on top Late Spring to Summer	Blooms at night and at the end of Spring. Bears red eatable fruit
Totem Pole <i>Lophocereus schottii</i> <i>f. Monstrosus</i>	15°	10' x 10' Columnar	No spines	Pink Late Spring to Summer	Interesting for its sculp- tural quality.

# Trees



Common Name <i>Botanical Name</i>	Gardening Basics Hardiness Sun	Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
Date Palm <i>Phoenix dactylifera</i>	15°	Moderate 40'x20'	E	Yellowish, hanging sprays N/A	Slender-trunked with crown of stiff sharp-pointed leaflets, females pro- duce small dates if male tree near
Desert Ironwood <i>Olneya tesota</i>	20°	Slow 20'x20'	E Gray-green leaves	Dusty lavender	Thorns, handsome tree, shade, low litter, frost sensitive Possible allergy problems.
Desert Willow <i>Chilopsis linearis</i>	0°	Moderate-Fast 25'x20'	D	White, pink, purple Spring-Fall	Beautiful trumpet-shaped flow- ers, attracts hummingbirds, no thorns, seasonal litter=, multi- trunked, willowy leaves Ok in light shade.
Edible Fig <i>Ficus carica</i>	10°	Moderate 20'x15'	D Rough green leaves	Inconspicuous	Smooth gray trunks, good shade, fruit drop may be a problem
Eucalyptus var. <i>Eucalyptus formanii e.torquata</i> <i>e.citriodora e.erythrorocorys e.spatulata</i>	15°	Slow-Moderate 15'x15'	E Needle-like	White, small Spring	Bushy, silver to tan leaves, rough gray bark
Feather Bush <i>Lysiloma microphylla</i> <i>v. thornberi</i>	20°	Fast 12'x10'	E Fine green leaves	White puffs Late Spring	Broad canopy, multi-trunked, spreading habit, male & female trees, thorns, high litter Patio tree.
Flamboyant Tree or Royal Poinciana <i>Delonix regia</i>	25°	Fast 30'x40'	D Fernlike leaves	Orange to fire engine red flowers Late spring	Blooms are followed by 2-ft long black seed pods. Umbrella-shaped silhouette.
Fruitless Olive <i>Olea europaea</i>	10°	Slow-Moderate 25'x25'	E	Cream non-showy	Mediterranean look
Guadalupe Palm <i>Brabea edulis</i>	18°	Slow 30'x15'	E	Cream, not conspicuous Spring	Fan palm, old leaves drop on their own, good desert tree
Honey Locust <i>Gleditsia triacanthos</i>	0°	Fast 30'x20'	D	Inconspicuous	Bright green leaflets, yellow in fall, thorn less varieties available, nearly black bark, some litter
Honey Mesquite <i>Prosopis glandulosa v.</i> <i>torreyana</i>	0°	Moderate to Fast 25'x25'	SE	White- yellow Spring	Thorns, shade, allergenic pollen, deep green leaves, larger leaves than Texas Honey Mesquite

# Trees



Common Name <i>Botanical Name</i>	Gardening Basics		Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
	Hardiness	Sun				
Indian Laurel Fig <i>Ficus microcarpa</i> (f. <i>retusa</i> )			Moderate 25'x35'	E Dense green foliage	None	Gray bark, may have weeping form, frost sensitive when young
Indian Rosewood <i>Dalbergia sissoo</i>	30°		Fast 30'x30'	SE	Cream, pendulous Spring	Round leaves, flowers not showy but fragrant, shade, upright, low litter
Italian Stone Pine <i>Pinus pinea</i>	15°		Moderate 40'x40'	E	None	Begins as bushy globe, matures as large flat-topped tree, source of pine nuts, heat & poor soil ok, deer & rabbit resistant
Jacaranda <i>Jacaranda acutifolia</i> or <i>J. mimosifolia</i>	20°		30'x20'	D	Lavender-blue or white, trumpet-like	Fern-like foliage, multi-trunked, frost sensitive, likes occasional deep irrigation
Mastic Tree <i>Pistacia lentiscus</i>	20°		Slow 15'x20'	E	Green, non-showy Spring	Good screen or small tree, low litter, shrub-like
Mediterranean Fan Palm (Dwarf Fan Palm) <i>Chamaerops humilis</i>	15°		Slow 15'x15'	E Green to blue-green leaves	Inconspicuous N/A	Spiky leaf stalks, ok in windy locations, low litter
Mexican Buckeye <i>Ungnadia speciosa</i>	0°		Slow 10'x10'	D Large dark green leaves turn yellow in Fall	Rose-pink Spring	Fragrant flowers, large shrub or good patio tree, seasonal litter, no thorns, shrub-like
Mexican Ebony <i>Pithecellobium mexicanum</i>	15°		Moderate 20'x20'	D Gray-green leaflets	Cream-yellow Puffballs Spring	Small thorns, natural look, gray bark, rounded form, seasonal litter
Mulga <i>Acacia aneura</i>	15°		Moderate 15'x20'	E	Inconspicuous	Round or pyramidal form, leathery leaf-like phyllodes are gray-green to silvery
Palo Verde <i>Cercidium</i> var.	15°		Moderate 15' - 30'	D Long bipinnate leaf	Bright yellow Pea like blooms Spring	Short-lived tree @ 20-40 years Tree susceptible to wood bores if without water for long periods of time.
Purple Orchid Tree <i>Bauhinia variegata</i>	22°		Fast 20'x20'	SE	Pink, purple Early Spring	Unique twin-lobed butterfly leaves, good patio plant, frost tender

# Cacti



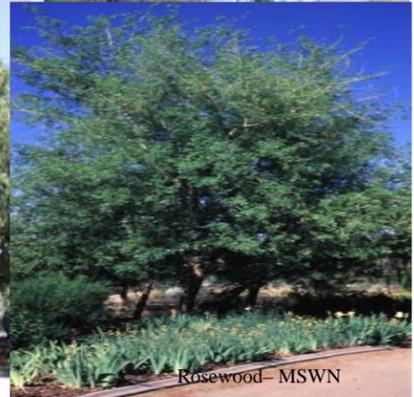
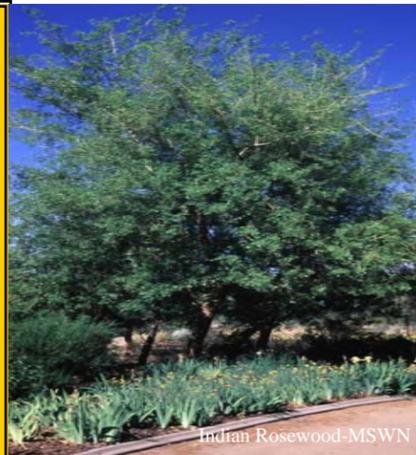
Common Name <i>Botanical Name</i>	Gardening Basics		Growth Rate and Size	Foliage Color	Flowers Color & Season	Comments
	Hardiness	Sun				
Blue Myrtle Cactus <i>Myrtillocactus geometrizans</i>	25°		15' x 10' Columnar Upright	Blue-green Branching	Small green/white Spring	Can be come treelike with age
Barrel Cactus <i>Ferocactus and Echinocactus</i> var. <i>F. cylindraceus</i> <i>F. acanthodes</i> <i>F. wislizenii</i> <i>E. grusonii</i>	20°		Slow To 11" To 2" in diameter	Single, massive and cylindrical	orange to yellow to reddish Lt. spring	Good for a natural landscape Native to Mohave desert.
Cardon Grande <i>Trichocereus terscheckii</i>	18°		Slow 15 x 8' treelike	Light Green, tan spines	Medium thorns	Similar to saguaro, but grown faster growing
Cholla "Jumping Cactus" <i>Cylindropuntia</i> variety sp.	0°		Moderate-Slow To 4'	Green cylindrical with conspicuous tubercles	Red to Yellow Spring	Jointed segments and can be prorogated at joint. Spreading upright
Cow's Tongue Prickly Pear <i>Opuntia lindheimeri</i> forma <i>linguiformis</i>	10°		6' x 6'	Green Pads are long and narrow	Yellow	Large red edible fruit
Hedgehog Cactus <i>Echinocereus</i> var. <i>E. engelmannii</i> <i>E. polycephalus</i> <i>E. grusonii</i>	25°		1' x 4' Clumping	Reddish-pink Stems are round to cylinder, spines	Orange /Red Spring to Summer	Vibrant Spring color
Hildmann's Cereus Queen of the Night <i>C. hildmannianus</i> <i>C. Peruvian</i>			15'x10' Columnar	Ribbed cylindrical branches Needlelike spine	White showy Blooms at night Spring-Summer	Fast-growing substitute for organ pipe.

# Succulents



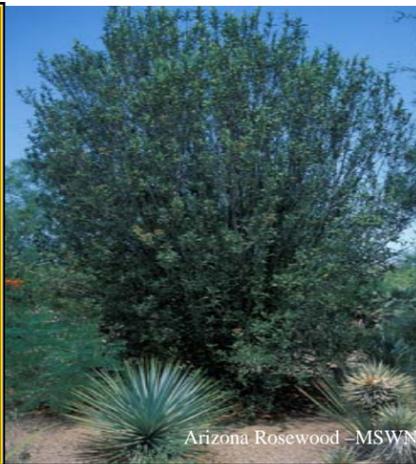
Common Name	Gardening Basics		Growth Rate and Size	Foliage Color	Flowers Color & Season	Comments
	Hardiness	Sun				
Octopus Agave <i>Agave vilmoriniana</i> <i>A.bracteosa</i>	25° 10°		Fast 5'-6'	Dk Green Symmetrical Rosette	Yellow Spring	Smooth margins and soft terminal thorns. Afternoon shade best. Dies after blooming.
Paleleaf Yucca <i>Yucca pallida</i> <i>Y. recurvifolia</i> <i>Y.rupicola</i>	-10° 0° -10°		Moderate 2' x 4' Clumping	Sage green Bluish green	White clusters on tall stalks Late Spring to Summer	Good for small spaces and in containers.
Parry's Agave <i>Agave parryi</i>	10°		Slow 2' x 2' Compact rosette	Gray-green Coarse txt	Bright yellow Summer	Distinctive leaf impressions. Particularly decorative.
Partridge Breast Aloe <i>Aloe variegata</i> <i>A.blue elf</i> <i>A.striata</i>	15° 15° 10°		Moderate 1' x 2' Densely layered rosette	Dk. Green Venegated smooth	Salmon spikes Winter to Spring	Good for small spaces and in containers. Blooms in winter.
Red Yucca Giant Hesperaloe <i>Hesperaloe funifera</i>	-10°		Moderate-Slow	Dk. Green Course texture	Coral-red spikes Spring to Summer.	Tolerates tough conditions. Attracts hummingbirds.
Slipper Flower <i>Pedilanthus macrocarpus</i>	30°		Moderate 6' x 6'	Lime green steams	Red slipper like Late Spring to Summer.	Unique plant form. Good in containers. Attracts humming-birds
Smooth Agave <i>A.desmettiana variegata</i> <i>A.angustifolia</i>	15° 25°		Fast 3' x 3'	Variiegated Lt. Green Symmetrical	Pale yellow	Very attractive. Smooth leaf margins. Succulent rosette.
Soap tree Yucca <i>Yucca elata</i>	-10°		Slow 6-20' x 6'	Green Long slender blades	White clusters on tall stalks Late Spring	Leave dead leaves on trunk to avoid sunburn damage.
Twin-Flowered Agave <i>Agave geminiflora</i> <i>A.ocabui</i> <i>A.victoriae-reginae.</i>	15°		Slow 3' x 3'	Dk Green Red-Brown tint	Yellow Winter	Symmetrical slender leaves with smooth margins.

# Trees



Common Name	Gardening Basics		Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
	Hardiness	Sun				
Screwbean Mesquite <i>Prosopis pubescens</i>	10°		Moderate 15'x20'	SE	White – yellow fuzzy	Pods like coiled springs attract large birds, spines, multi-trunked, needs more water than other mesquites
Shoe String Acacia <i>Acacia stenophylla</i>	15°		Fast 30'x20'	E Long droopy leaves	Cream puffballs Spring	No thorns, light shade, low litter, upright & airy
Silk Floss Tree <i>Chorisia speciosa</i>	20°		Moderate 30'x25'	SE	Pink to red showy Fall	Thorns on trunk, spectacular flowers, upright
Sweet Acacia <i>Acacia smallii (a.minuta)</i> <i>a.farnesiana</i>	10°		Moderate 20'x20'	SE	Yellow puffballs Winter-Spring	Small thorns, sweet-scented flowers, vased shaped, drops messy seed pods, <i>a.farnesiana</i> is a cold sensitive variety
Texas Ebony <i>Ebenopsis ebano</i>	10°		Slow 15'x15'	E	Cream to yellow Spring-Summer	Thorns, rich green, to avoid burn do not over-prune, filtered shade, fragrant flowers, moderate litter
Twisted Acacia <i>Acacia schaffneri</i>	15°		Moderate 15'x20'	SE	Yellow puffballs Spring	Short thorns, fragrant blooms, branches curving and almost black, fragrant flowers
Velvet Mesquite (Arizona) <i>Prosopis velutina (p. juliflora)</i>	0°		Moderate to Fast 25'x25'	SE Ferry gray-green leaves	White- yellow Spring	Some thorns, multi-trunked, low branches, dark shaggy bark, good wild-life plant, allergenic pollen, seasonal litter
Willow Acacia <i>Acacia salicina</i>	20°		Fast 30'x15'	E	Cream puffballs Year round	No thorns, narrow dark-green leaves, pendulous branches, upright, good for narrow areas, low litter

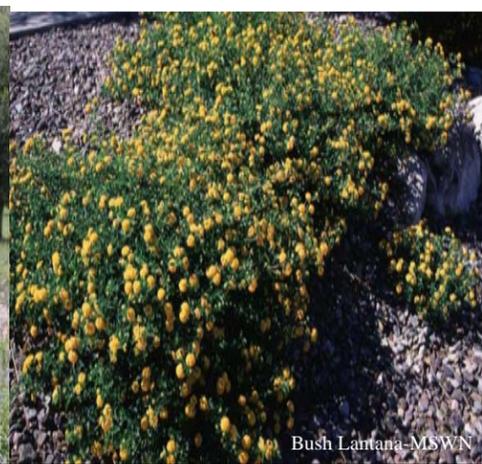
# Shrubs



Arizona Rosewood-MSWN



Texas Olive-MSWN



Bush Lantana-MSWN

Common Name <i>Botanical Name</i>	Gardening Basics		Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
	Hardiness	Sun				
Anachuita or Texas Olive <i>Cordia boissieri</i>	20°		Moderate 10-15'x10-15'	D	White Spring-Fall	Large shrub or small tree slightly toxic fruit is eaten by birds
Arizona Rosewood <i>Vauquelinia californica</i>	-10°		Slow 15'x10'	E	White Spring-Summer	Native alternative to oleander
Arizona Yellow Bells <i>Tecoma stans</i>	20°		Fast 10x10	E	Yellow Spring-Fall	Attracts hummingbirds
Baha Fairy Duster <i>Calliandra californica</i>	20°		Moderate 5'x5'	SE	Red Powderpuffs Spring-Fall	Informal hedge; attracts hummingbirds and butterflies
Acacia, Leather-Leaf <i>Acacia craspedocarpa</i>	20°		Moderate 10'x8'	E	Yellow puffs Spring-Summer	No thorns, round thick "leaflets" low litter, good in small spaces or large containers, very drought tolerant
Bee Brush <i>Aloysia gratissima</i>	15°		Moderate 6'x6'	SE	White to Pale Purple Spring-Fall	Attracts butterflies has very small thorns
Black Dalea <i>Dalea frutescens</i>	0°		Moderate-Fast 3'x4'	E-SE	Rose-Purple Fall-Winter	Attracts quail; winter color
Blue Sage or Germander Sage (Mexican Blue Sage) <i>Salvia chamaedryoides</i>	30°		2'x2'	E	Deep Blue Early Spring-Summer	Short lived
Bush Dalea <i>Dalea pulchra</i>	15°		Moderate-Fast 4'x5'	E	Violet Winter-Spring	Attracts butterflies
Bush Lantana <i>Lantana camara</i>	10°		Fast 4'x4'	E	Yellow, Red, Orange, Pink All year	Hedge or color accent; attracts butterflies v. 'Trailing Lantana' used as groundcover
Bush Morning Glory <i>Convolvulus cneorum</i>	15°		Fast 2-5'x2-5'	E	White, Pink Spring-Summer	Used on banks or in rock gardens

# Succulents



Medicinal Aloe-MSWN



Desert Milkweed-MSWN



Banana Yucca-MSWN

Common Name <i>Botanical Name</i>	Gardening Basics		Growth Rate and Size	Foliage Color	Flowers Color & Season	Comments
	Hardiness	Sun				
Banana Yucca <i>Yucca baccata</i>	-20°		Moderate	Green U-shaped Cross section	White clusters on tall stalks Spring to summer	Striking show of flowers. Effective security plant.
Candelilla <i>Euphorbia antisybitica</i>	10°		Moderate	Lt. Green Small scales	Pink and white Spring to Summer	Good in Containers. Slender upright, leafless stems.
Cape Aloe <i>Aloe ferox</i>	25°		Moderate	Gray, green & Red Spiny leaves	Orange-red spikes Winter to Spring	Showy candelabra shaped flower spikes attract hummingbirds
Dawe's Aloe <i>Aloe dawei</i>	25°		Moderate	Gray green Leaves have thorns	Red spikes Winter	One of the most spectacular flowers
Desert Milkweed <i>Asclepias subulata</i> <i>Linaria</i>	25°		Moderate	Gray green Coarse texture	White clusters Spring to Fall	Striking winter color . Attracts hummingbirds.
Desert Spoon <i>Dasyliirion wheeleri</i>	5°		Moderate 3'x5'	Silver Grey	Small white flowers	Large thick inflorescence
Elephant's Food <i>Portulacaria afra</i>	30°		Moderate 3'x4'	Green	Pink (rarely occurs) Spring	Adapted to many different conditions. Good in containers
Lechuguilla Verde <i>Agave bovicornuta</i>	20°		Moderate	Bronze green Green smooth	Yellow Late winter to Spring	Reddish brown marginal teeth are very decorative.
Medicinal Aloe <i>Aloe vera</i> <i>A. barbadensis</i>	25°		Fast	Green Smooth texture	Yellow spikes Spring	A prolific and tough aloe. Attracts hummingbirds. Afternoon shade best.
Mescal Ceniza <i>Agave colorata</i> <i>A. chrysantha</i> <i>A. murpheyi</i> <i>A. palmeri</i>	15° 10° 5°		Moderate	Green Coarse	Yellow Spring	Striking banded leaves. Distinctive toothed margins.

# Vines



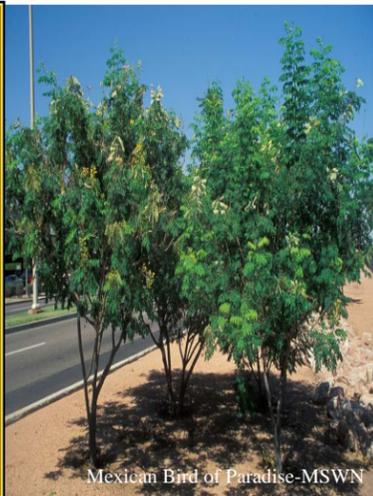
Common Name <i>Botanical Name</i>	Gardening Basics		Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
	Hardiness	Sun				
Bougainvillea <i>Bougainvillea glabra</i> <i>B. spectabilis</i>	25°		Fast 15'x20'	E	Multi Year-round	High litter, thorns Special planting techniques required.
Carolina Jessamine <i>Gelsemium sempervirens</i>	25°		Moderate 20'x20'	E	Yellow Late Winter- Spring	Cut back severely if vine gets top heavy. All parts are poisonous
Cat's Claw Vine <i>Macfadyena unguis-cati</i>	20°		Fast 25'x25'	E	Large Yellow Early Summer	High litter Can be very hard to eradicate
Creeping Fig <i>Ficus pumila</i>	15°		Fast Unlimited	E	Not significant	Severe pruning will restore juvenile leaf form. Climbs anything and will peel paint if vine gets top heavy
Desert Orchid <i>Mascegnia lilacina</i>	25°		Fast 15'x15'	SE	Purple	Flowers followed by large chartreuse paper-like pods
Lady's Bank Rosea <i>Rosa banksiae</i>	10°		Fast 20'x15'	SE	White Spring	Moderate litter thorns
Pink Trumpet Vine <i>Podranea ricazolicana</i>	10°		Moderate 20'x10'	SE	Pink Summer-Fall	Vigorous woody climber. Flowers terminate a branch.
Potato Vine <i>Solanum jasminoides</i>	25°		Moderate 15'x15'	E	White flowers in small cluster	All parts poisonous Good overhead for shade.
Queen's Wreath <i>Antigonon leptopus</i>	20°		Fast 15'x15'	D	Bright Pink Clusters Summer	Plant is attractive to bees & butterflies.
Snail Vine <i>Vigna caracalla</i>	25°		Fast 20'x20'	E	Pale Purple Spring-Summer	Flowers shaped like a snail. May die back in winter.
Star Jasmine <i>Trachelospermum</i>	15°		Moderate 10'x20'	E	White flowers in small cluster	Attractive to bees, It is good in raised beds or entry of gardens, edging for walkways.
Trumpet Vine <i>Campsis radicans</i>	10°		Fast 20'x10'	D	Pink Spring-Summer	May cause skin irritation
Yellow Morning Glory <i>Merremia aurea</i>	15°		Moderate 10'x10'	D	Bright Yellow Summer-Fall	Plant has a tuber and will grow back if cut back.
Yellow Orchid Vine <i>Mascegnia macroptera</i> <i>Callaeum macropterum</i>	25°		Fast 15'x15'	SE	Yellow Clusters Spring-Summer	Flowers followed by large chartreuse paper like pods.

# Shrubs



Common Name <i>Botanical Name</i>	Gardening Basics		Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
	Hardiness	Sun				
Cape Honeysuckle <i>Tecomaria capensis</i>	30°		Fast 6'x5'	E	Orange-red All year	Attracts hummingbirds; espalier on South facing wall
Cape Plumbago <i>Plumbago capensis</i>	20°		Fast 6'x8'	E or SE	White to Light Blue Spring-Summer	Will cover fences, walls or banks
Chapparral Sage <i>Sabia clevelandii</i>	10°		Fast 4'x4'	E	Blue, Violet Spring-Summer	Fragrant foliage attracts hummingbirds
Chihuahuan Sage <i>Leucophyllum laevigatum</i>	10°		Moderate 4'x5'	E	Lavender Summer-Fall	Good informal hedge, fragrant flowers
Chinese Hibiscus <i>Hibiscus 'rosa-sinensis'</i>	30°		Moderate 15'x15'	E	Red, Yellow, Orange Most of the year	Requires late afternoon shade in summer; use as screen, border plant, specimen or foundation plant
Desert Hackberry <i>Celtis pallida</i>	10°		Moderate 8'x10'	E	Yellow-green Spring	Orange berries; good plant for wildlife
Desert Lavender <i>Anisacanthus thurberi</i>	15°		Moderate	E	Lavender	Attracts Hummingbirds Fragrant foliage
Dwarf Myrtle <i>Myrtus communis 'compacta'</i>	25°		Slow	E	Spring White	Low edgings, foundation plantings or compact hedge Produces blue berries
Feathery Cassia or Feathery Senna <i>Cassia artemisioides</i> or <i>Senna artemisioides</i>	15°		Fast 3'x6'	E	Yellow Fall-Winter- Spring	Grey leaves v. Green feathery Cassia, informal shrub; seasonal accent
Firecracker Bush <i>Hamelia patens</i>	20°		Moderate 4'x4'	SE	Red-Orange Summer	Attracts hummingbirds

# Shrubs



Mexican Bird of Paradise-MSWN



Hop Bush-MSWN



Little Leaf Cordia-MSWN

Common Name Botanical Name	Gardening Basics		Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
	Hardiness	Sun				
Firethron <i>Pyrocanthus</i> <i>Pyroantha</i>	10°		Fast 10'x6'	E	White Spring	Glossy green foliage, orange or red berry clusters; sharp thorns; good hedge
Globe Mallow aka Desert or Apricot <i>Sphaeralcea ambigua</i>	0°		Fast 3'x3'	E	Orange, White, Red or Salmon Springs	May irritate eyes and skin. Bright flowers shaped like mini hollyhocks.
Golden Senna <i>Cassia candolleana</i> or <i>Senna candolleana</i>	25°		Fast 6'x6'	E	Yellow Spring & Fall	Seeds need scarification
Gray Thorn <i>Ziziphus obtusifolia</i>	15°		Slow 6'x8'	D	Creamy Non-showy	Leaves are green vs. Feathery Senna (grey)
Guayacan <i>Guaiacum coulteri</i>	25°		Slow-moderate	S	Violet-blue Summer	Vivid flower color, can become multi-trunked tree in frost free site
Hop Bush <i>Dononaea Viscosa</i>	15°		Moderate 12'x6'	E	Yellow-green or Purple	Oleander alternative; papery fruit attracts birds
Japanese Pittosporum <i>Pittosporum tobira</i>	25°		Moderate-Fast 5-8'x4-6'	E	White Spring	Orange blossom fragrance; dwarf available; clipped hedge, screen, border or container
Jojoba <i>Simmondsia chinensis</i>	15°		Slow 6'x6'	E	Yellow-green Spring	Good for naturalistic setting; landscape, screen, or hedge
Langman's Sage <i>Leucophyllum langmaniae</i>	10°		Moderate 5'x5'	E	Lavender Summer-Fall	Good summer color
Laurel-Leaf Coccolus <i>Coccolus laurifolius</i>	15°		Moderate 25'x25'	E	Yellow Non-showy	Border, screen, espalier or small patio tree
Little Leaf Cordia <i>Cordia parvifolia</i>	15°		Moderate 6'x6'	S	White Spring-Fall	Screen or informal hedge
Mexican Bird of Paradise <i>Caesalpinia mexicana</i>	15°		Moderate-Fast 10'x8'	E	Lemon yellow Spring-Fall	Shrub or small tree; attracts hummingbirds

# Ornamental Grasses



Bull Grass-MSWN



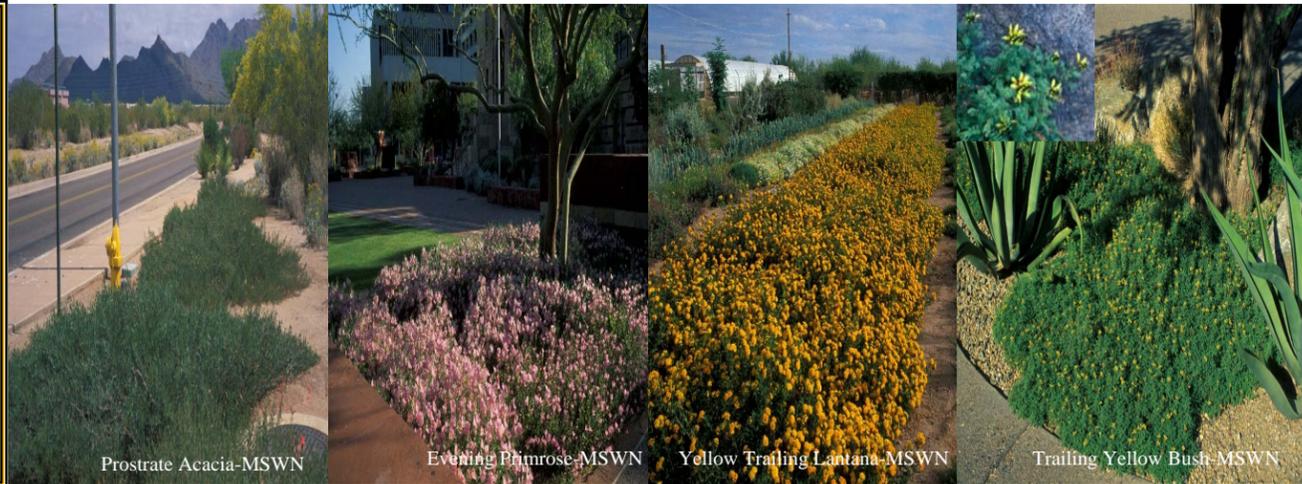
Sideoats Gramma-MSWN



Bamboo Muhly-MSWN

Common Name Botanical Name	Gardening Basics		Growth Rate and Size	Foliage Color	Flowers Color & Season	Comments
	Hardiness	Sun				
Bamboo Muhly <i>Muhlenbergia dumosa</i>	10°		Moderate 4'x4'	Green, dries to tan Summer	Inconspicuous	Narrow leaves with flower clusters on slender, woody stems A striking grass resembling a bamboo
Blue Gama <i>Bouteloua gracilis</i>	-10°		1-2'	Fine grey-green	Green to Purple June-Sept	Dry plants. Good in rock garden.
Bull Grass <i>Muhlenbergia emersleyi</i>	-10°		Fast 2-3' x 2-3'	Tan	Lt. Purple Fall	Long blue-green leaves with loose, rosy flower spikes Dries in the winter to a tan color
Deer Grass <i>Muhlenbergia rigens</i>	-10°		Fast 4'x4'	Green	Tan heads Fall	Large, coarse bunchgrass.
Eulalia Grass <i>Miscanthus sinensis</i>	-10°		Fast 6'x4'	Grey-green	Tan-coppery	Tall, graceful looking.
Japanese Blood Grass <i>Imperata cylindrica</i>	10°		Fast 18' x 18"	Green with red tips	Creamy tan	Clumping grass with erect stems and top half is a rich red color Completely dormant in winter. Spreads by underground runners
Mondo Grass <i>Ophiopogon japonicus</i>	25°		Moderate 6-10"	Dark green	Light lilac to white	Forms grass like clumps or mounds Fine texture blade
Mexican Feather Grass <i>Nassella tenuissima</i>	-10°		Fast 18' x 18"	Green to tan	Tall heads Fall	Feather or needle grasses have large open airy inflorescences that can be impart lightness and motion in the garden. Very thin
Pink Muhly <i>Muhlenbergia capillaries</i>	0°		Fast 3'x3'	Glossy Green	Pink Heads	One of the most attractive and popular ornamental grasses. Glossy green foliage and mist pink flower spikes in fall and early winter.
Sideoats Grama <i>Bouteloua curtipendula</i>	-10		Fast 2' x 1 1/2'	Green, dries to tan	Purple Spring-Summer	Interesting seed stalks are relished by birds

# Ground Covers



Prostrate Acacia-MSWN

Evening Primrose-MSWN

Yellow Trailing Lantana-MSWN

Trailing Yellow Bush-MSWN

Common Name <i>Botanical Name</i>	Gardening Basics Hardiness Sun	Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
Prostrate Acacia <i>Acacia redolens</i>	15°	Fast 18"x8"	E	Yellow Spikes in Spring	Good for filling up large spaces, aggressive grower Woody trunk with a brownish fruit pod
Desert Broom <i>Baccharis hybrid</i>	0°	Moderate 3'x4'	E Dk Gr.	Cream-colored Flower head	Eleven Species of Baccharis
Prostrate Gemander <i>Teucrium chamaedrys prostratum</i>	-10°	Moderate 8"x16"	E	Rosy lavender Spring-Fall	Good in rocky banks.
Yellow Trailing Lantana <i>Lantana sp.</i>	15°	Slow 18"x3"	E	Yellow Warmest months of Summer	Virtually seedless when planted separate from other varieties. Cut back in early spring to keep bushy. Lantana berries are poisonous
Purple trailing Lantana <i>Lantana Montensis</i>	20°	12" x 6'		Blue Flowers	
Myoporum Prostratum <i>Myoporum parvifolium</i>	25°	Fast 4'x 8'	E	White	May die back n 5-8 years
Evening Primrose <i>Oenothera caespitosa</i>	20°	Moderate 1'x3'	E-D	White Spring-Summer	Fragrant flowers. Opens in late evenings to following morning.
Red Spike Ice Plant <i>Cephalophyllum</i>	25°	Slow 8"x12"	E	Red Winter-Early Spring	Needs water twice a week in summer. May die back in 5-8 years
Thyme <i>Thymus serpyllum</i>	25°	Moderate 6"x12"	E	Lavender-blue Spring-Summer	Flowers are in tubular clusters. Fair weather plant and may Not tolerate heat.
Trailing Indigo Bush <i>Dalea greggii</i>	10°	Fast 18"x12'	E	Rose-purple Spring-Summer	Looks best if allowed to mound. Don't shear.
Trailing Rosemary <i>Rosmarinus officinalis</i>	0°	Moderate 20"x6'	E	Blue Spring-Summer	Cuttings may root in water. Strong aromatic leaves
Trailing Yellow Bush <i>Dalea Capitata</i>	5°	8"x3'	D	Yellow	Lemony scent

# Shrubs



Oleander-MSWN

Mexican Honeysuckle-MSMN

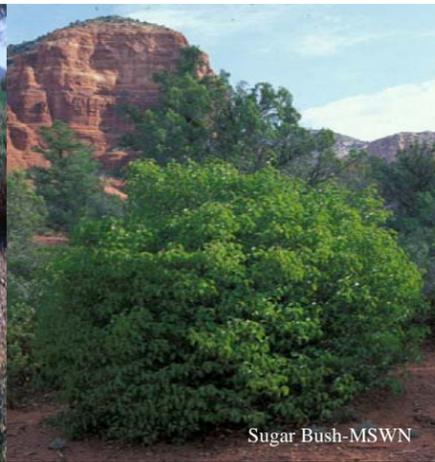
Orange Bells -MSWN

Common Name <i>Botanical Name</i>	Gardening Basics Hardiness Sun	Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
Mexican Honeysuckle <i>Justicia spicigera</i>	15°	Moderate 3'x4'	E	Orange or Orange-red All Year	Attracts hummingbirds; may be sold in AZ under name of 'Desert Honeysuckle'
Myrtle <i>Myrtus communis</i>	15°	Moderate 5'x4'	E	White Spring-Summer	Dwarf 'Compacta' varieties available; Shrub or small tree; edible blue berries
Natal Plum <i>Carrisa grandiflora</i> ( <i>Carrisa macrocarpa</i> )	30°	Fast 2-7'x7-10'	E	White, Pink Spring	Edible red plum fruit; dwarf available; groundcover, hedge or screen; thorns
New Zealand Flax <i>Phormium tenax</i>	0°	Fast 9'x3'	E	Red or reddish orange Spring-Summer	Use in containers or bold accents; good garden focal point; flowers grow to 15 feet tall
Ocotillo <i>Fouquieria splendens</i>	15°	Slow 8-25'x10'	D	Orange Spikes Spring	Spiny stems; pieces of canes stuck in the ground will grow; may remain dormant for 3 years; can use as 'living' fence
Oleander <i>Nerium oleander</i>	25°	Fast 6'x4'	E	White, Pink, Red Spring-Fall	Large shrub, small tree, hedge, screen
Orange Bells <i>Tecoma stans hybrid</i>	20°	Fast 8'x5'	S	Orange All Year	Attracts hummingbirds; Colorful background screen
Pea Bush <i>Dalea pulchra</i>	15°	Moderate 4'x5'	S	Purple Summer-Fall	
Pineleaf Milkweed <i>Asclepias linaria</i>	15°	Moderate 3'x3'	E	White to Greenish Spring-Fall	Food source for Queen & Monarch butterflies
Pineapple Guava <i>Fejfoa sellowiana</i>	15°	Slow 5'x5'	E	Silver with red stamens Spring	Green edible fruit; espalier, screen or hedge
Pomegranate <i>Punica granatum</i>	15°	Moderate 8'x6'	D	Orange to Red Spring	Edible fruit; flowers attract hummingbirds
Red Bird of Paradise <i>Caesalpinia pulcherrima</i>	15°	Fast 6'x6'	E	Orange or Red Spring-Fall	Attracts hummingbirds, butterflies; 'Phoenix Bird' has bright yellow flowers

# Shrubs



Red Eremophila-MSWN



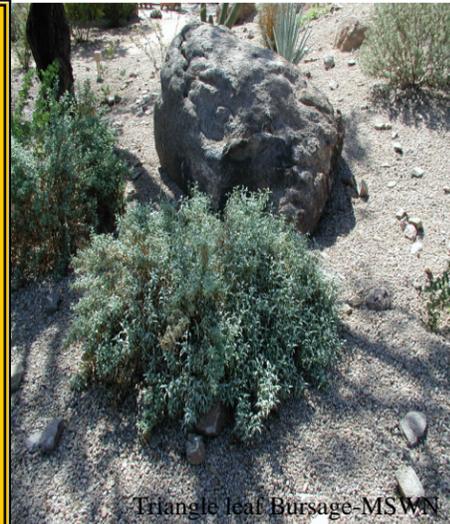
Sugar Bush-MSWN



Superstition Mallow-MSWN

Common Name Botanical Name	Gardening Basics		Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
	Hardiness	Sun				
Red Eremophila <i>Eremophila maculata</i>	15°		Fast 6'x6'	E	Red Winter-Spring	Attracts hummingbirds
Red Justicia <i>Justicia candidans</i>	20°		Moderate 3'x3'	E	Red Summer-Fall	Good in containers; attracts hummingbirds
Rosemary <i>Rosemarinus officinalis</i>	10°		Moderate 4'x4'	E	Blue Winter-Spring	Herb for the arid climate; low growing; use as bank or ground cover; will cascade; also may be used as prostrate hedge or border
San Marcos Hibiscus <i>Gossypium harknessii</i>	25°		Moderate 3'x4'	E	Yellow with red center Summer-Fall	
Shrimp Plant <i>Justicia brandegeana</i>	25°		Fast 3-6' x 3-4'	E	Orange bracts & white blossoms All Year	Foundation plant or container; tropical accent
Shrubby Cassia (Shrubby Senna) <i>Cassia wislizeni</i> or <i>Senna wislizenii</i>	0°		Moderate 4'x6'	D	Yellow Summer-Fall	Summer color
Silver Leaf Cassia <i>Cassia phyllodinea</i> or <i>Senna phyllodinea</i>	20°		Fast 6'x6'	E	Yellow Fall-Spring	Needs good drainage
Sugar Bush <i>Rhus ovata</i>	10°		Slow 10-15' x 12'	E	Red Buds Cream Flower Spring	Good screen or hedge; edible red berries
Superstition Mallow <i>Abutilon palmieri</i>	25°		Fast 4'x3'	E	Orange-yellow Spring -Fall	Native AZ shrub
Texas Mountain Laurel <i>Sophora secundiflora</i>	10°		Slow 15-25' x 10-15'	E	Purple Winter-Spring	Large shrub or small tree; soak root ball every 2 weeks/summer; poisonous seeds Light shade when young.
Texas Sage or Texas Ranger <i>Leucophyllum frutescens</i>	10°		Slow Varies 6'-8'x6'-8'	E	Rose pink White Pink Summer-Fall	Should not be crowded into small spaces which require severe pruning and limits flowering; Green Cloud', Green foliage White Cloud', Gray foliage
Split Leaf Philodendron <i>Philodendron selloum</i>	25°		Moderate 6-12' x 6-15'	E	Green Non-showy	Leaves 3'x4'; accent plant can be used in containers

# Shrubs



Triangle leaf Bursage-MSWN



Yellow Bird of Paradise-MSWN



Plumbago-MSWN

Common Name Botanical Name	Gardening Basics		Growth Rate and Size	Foliage E/D/SE	Flowers Color & Season	Comments
	Hardiness	Sun				
Triangleleaf Bursage <i>Ambrosia deltoidea</i>	20°		Moderate 1'x2'	E	Green Non-showy Winter-Spring	Pollen causes allergies; burs cling to pets
Turpentine Bush <i>Ericameria laricifolia</i>	-10°		Moderate 3'x4'	E	Brilliant yellow Summer-Fall	Seeds attract birds
Viburnum <i>Viburnum suspensum</i>	25°		Moderate 8-10' x 8-10'	E	White Winter-Spring	Screen or hedge; foundation plant; red berries
Violet Silverleaf or Violet Texas Ranger <i>Leucophyllum candidum</i>	10°		Moderate 4'x4'	E	Purple Spring-Fall	Silvercloud' slightly larger than 'Thundercloud'; both have silvery leaves; susceptible to over watering
Weeping Dalea <i>Dalea versicolor</i> v. <i>sessilis</i>	10°		Moderate 3'x4'	E	Purple Fall-Spring	Requires well drained soil; winter color
White Plumbago <i>Plumbago scandens</i>	15°		Fast 3'x3'	E	White Summer-Fall	Foliage turns maroon in winter
Wright's Bee Bush <i>Aloysia wrightii</i>	10°		Moderate 5'x5'	D	White Spring-Fall	Attracts butterflies; nectar for bees
Xylosoma <i>Xylosoma congestum</i>	15°		Moderate 8-10' x 8-10'	E or D	Off-white Non-showy Spring	Espalier, screen, hedge or patio tree
Yellow Bird of Paradise <i>Caesalpinia gilliesii</i>	-10°		Moderate 6'x5'	SE	Yellow w/ red Stamens Spring-Fall	Attracts hummingbirds and butterflies; accent plant or shrubby border. Long red stamens.
Yellow Oleander <i>Thevetia peruviana</i>	20°		Slow 3-20' x 3-12'	E	Yellow, inconspicuous Early Summer	Poisonous fruit, sap, seed; use as hedge, large shrub or small patio tree
Yew Pine <i>Podocarpus macrophyllus</i>	15°		Slow 15-30' x 8'	E	Green Non-showy Summer	Tree of shrub; narrow screen, espalier, hedge or barrier, or in containers