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## SUMMER HOURS

NURSERY: 6:00 am to 2:30 pm

OFFICE: 6:00 am to 3:30 pm

Monday through Friday. Closed Weekends.

# UPCOMING EVENTS

## JULY 11

### **Facility and Grounds Management Expo**

Utah Valley State College, Orem UT. Information: Contact Luella Jones at 801.863.8894.

## JULY 27-AUGUST 3

### **Perennial Plant Association 2003 Symposium**

Hyatt Regency, Sacramento, CA July 27-July 31. August 1-3 Westin St. Francis Hotel, San Francisco, CA. Information: Contact 614.771.8431 or email ppa@perennialplant.org.

## AUGUST 2-6

### **International Society of Arboriculture 79th Annual Conference and Trade Show "Tree Stories."**

Montreal Convention Centre, Montreal, Quebec, Canada. Information: Contact ISA at 217.355.9411 or visit www.isa-arbor.com.

## AUGUST 7-10

### **Recovery & Restoration, New Mexico Native Plant Society annual meeting**

Los Alamos, NM. Information: Contact Chick Keller 505.662.7915 or email: alfanso@cybermesa.com.

## AUGUST 15-17

### **Nursery/Landscape Expo, Dallas Contention Center**

Dallas TX sponsored by the Texas Nursery & Landscape Association with participating state nursery associations in Mississippi, Louisiana, Oklahoma and Arkansas, plus the Texas Recreation and Parks Society. Information: Contact the TNLA office, 7730 IH-35, Austin, TX 78745 (512) 280-5182; fax 280-3012; email: info@txnla.org.

## SEPTEMBER 17-20

### **Engineering Green, 2003 National Urban Forest Conference**

San Antonio, TX. Co-sponsored by American Forests, the Texas Urban Forestry Council, San Antonio City Public Service, and the Texas Forest Service. Information: Visit the American Forests website at www.americanforests.org or call 703.904.7508.

## SEPTEMBER 18-19

### **Southwest Horticultural Trade Show & Conference**

Phoenix Civic Plaza, Phoenix, AZ, sponsored by the Arizona Nursery Association. For information contact ANA, 1430 W. Broadway Road, Suite A180, Tempe, AZ 85282; Information: Contact (480) 966-1610; fax 966-0923; email: azna@primenet.com.

## SIGNATURE TREES

July/August

Over the years Mountain States Wholesale Nursery has been recognized as a leader in new plant introductions adapted to arid conditions. Certainly one of the most rewarding achievements for any nursery is the introduction of a fine quality tree. The length of time required to seek out, evaluate and produce a tree with truly unique characteristics is a time consuming venture that may not provide a return for many years. To create a worthwhile xeric tree is also particularly challenging. But once a tree has been deemed worthy of production, a nursery is proud to proclaim it as their signature tree.

Mountain States is pleased to present several trees that we feel merit our signature. They include two selections of mesquite and two fine desert willow varieties. Please take a moment to discover our signature trees!

Mesquites have been somewhat of an enigma in the west, both prized and hated virtually at the same time. In olden days the trees provided much needed shade, not to mention wood for fuel and seed pods that served as a food source, but cattlemen despised them for ever-encroaching on rangeland and severely limiting the growth of grass. Little did they know that overgrazing encouraged the spread of mesquite bosques.

Today mesquites still provide valuable shade, but continue to have a bad name because of the sharp thorns they bear and the problems they

sometimes create in the landscape. In order to popularize mesquites, nurseries have produced many thornless varieties of mesquite through hybridization. Although one of the benefits of crossing strains may be the loss of thorns, the hybrid vigor created may lead to excessive growth especially if fueled by overwatering and fertilization. The consequence is that the upper portion of the tree may outgrow the root system leading to problems with wind throw as a result of shallow root development

### ***Prosopis hybrid Phoenix***<sup>TM</sup>

We are proud to offer a grafted clone of a *Prosopis hybrid* of South American origin that we affectionately call Phoenix<sup>TM</sup>. This selection has been nearly two decades in the making and has gone through several generations. Of particular note is that this hybrid clone is grafted to a *Prosopis juliflora* rootstock which has subdued the upper growth, thus allowing the root system to grow in harmony with the top. The branch structure is quite uniform allowing our nursery staff the opportunity to train the trees to best suit the landscape function. The result is a superior thornless hybrid mesquite with a reliable root system supporting an excellent shade producing canopy. Phoenix<sup>TM</sup> will mature to a height and width of 30 feet. In warm winter deserts it will remain semi-evergreen. Hardy to 15°F, it is also suitable for moderately high elevations such as Las Vegas and El Paso.

### ***Prosopis glandulosa*** **Maverick**<sup>TM</sup>

The "bookend" for the Phoenix<sup>TM</sup> mesquite is *Prosopis glandulosa* Maverick<sup>TM</sup>, a thornless selection of the attractive Texas honey mesquite. With its spreading crown and bright green billowing foliage, this remarkable tree looks for all intents and purposes like a California pepper tree. Fortunately, it has none of the typical problems with wind throw and yellowing foliage that occurs on that particular tree in desert conditions. It is one of the hardiest of mesquites, tolerating temperatures down to 0°F. Also a grafted selection, it is typically multi-trunked or very low branching. The Maverick<sup>TM</sup> honey mesquite matures to a height of 30 feet and a width of 35 feet. It is truly a jewel in any native setting lending shade to homes and landscape.

### ***Chilopsis linearis*** Lucretia **Hamilton**<sup>TM</sup> and Warren **Jones**<sup>TM</sup>

Desert or wash willows are common throughout the southwest and northern Mexico. It is mistakenly named after a willow as the fine linear leaves look so much like the water loving tree but the similarity ends right there. Unlike the more primitive willow, this diminutive tree bears gorgeous orchid-like flowers that resemble those of other members of the Bignonia family, which include *Catalpa*, *Campsis* and

*Tecoma*. The flowers are produced all summer long when every other plant is struggling just to stay alive. The attractive blossoms perfume the air and provide nectar for large bees and hummingbirds. Most trees seldom exceed 30 feet in height and are typically low branched. The bark of young trees is smooth and gray, gradually turning brown and forming deep seams. The wood is strong and pliable and was prized by Native Americans to create bows which in turn created another common name, bow willow.

Mountain States offers two fine selections, both of which are named for prominent people. Lucretia Hamilton™ is a lovely, smaller stature desert willow befitting the feminine name it bears in honor of Lucretia Hamilton. The late Mrs. Hamilton for years provided the botany department at the University of Arizona with illustrations for textbooks. This strain also has intense burgundy flowers produced nearly the entire summer. Slower growing and smaller in size, it is a perfect compliment for the ever more common compact residential landscape. Lucretia Hamilton™ is reliably hardy to 0°F, making it more suitable for moderately high elevation landscapes.

Warren Jones™ is a strain that was named in honor of the famed Landscape Architecture Professor Emeritus Warren Jones, also of the University of Arizona. This desert willow grows larger to the more characteristic height of 25 to 30 feet and it has a more upright growth habit. It was selected for the large, showy flowers that are light pink in color. Producing fewer seedpods than usual, this introduction is more suitable for patios and along paths or walks. Hardy to at least 10°F Warren Jones™ is well matched for lower elevations. In fact, in the more mild regions of southern California it is nearly evergreen.

In addition to our signature trees, we offer two other excellent varieties for your consideration. The first is a fine tree of desert heritage and the latter is a plant that is marvelously adapted to desert conditions.

### *Cercidium* hybrid ‘Desert Museum’

You may have heard of this remarkable tree that was introduced by the Arizona-Sonora ‘Desert Museum’ through the efforts of Mark Dimmitt. Actually a result of a three-way hybridization between *Cercidium microphyllum* and *Parkinsonia aculeata*, which was then crossed with *Cercidium floridum*, the progeny bears all the wonderful characteristics of its parents and surrogate mother. Except for the absence of thorns! As oft happens in hybridization procedures the thorns were lost in the process making this tree suitable for plantings near walks or as a patio tree. Occasionally, plant taxonomists will encourage a shift in the nomenclature of plants and this one is caught in the middle. Although we continue to list ‘Desert Museum’ as a *Cercidium*, evidently the more correct name would be *Parkinsonia*.

The vigorous growth of ‘Desert Museum’ was a dilemma at first, especially when provided too much water, as many of the original specimens had a tendency to split or blow over in the wind. We have concluded that by grafting this excellent clone on seedling palo verde rootstock, we see controlled top growth that allows for a more balanced mature tree. The growth tends to be more upright than the parents as well, which allows designers to use this marvelous desert tree in parking lots and pedestrian areas.

As with other palo verdes this selection has the smooth green bark and the exquisite display of yellow flowers that occurs in late spring. Delightfully, ‘Desert Museum’ may continue to bloom sporadically

through the summer if provided supplemental water. The flowers are quite a bit larger than the species as well. This has become a very popular tree over the past few years. If you are not familiar with it, take a look at some of our photos on the web site at [www.mswn.com](http://www.mswn.com).

### *Pistacia* x ‘Red Push’

This handsome shade tree is a kissing cousin of the familiar Chinese Pistache. Actually a cross between *Pistacia atlantica* and *P. integerrima* the result is a superior deciduous tree that matures to develop a broadly oval crown with a height of 25 to 40 feet and around 30 feet wide. Much like your rapidly growing teenage son, the ‘Red Push’ is somewhat gawky in youth but eventually develops a stature worthy of any landscape. The compound leaves emerge bearing a dis-tinctive reddish tone, hence the name ‘Red Push’. Gradually the foliage will even out to a shade of medium green. Fall brings a carnival of color with hues of red, orange and yellow, holding its color much longer than its Chinese cousin.

This is truly a dual purpose tree, as it is not only used as a great shade tree but also as a rootstock for fruit bearing pistachio trees. Arizona Pistachio Nursery in Tucson is the nursery which coined the name ‘Red Push’ and first began promoting this tree as a non-fruit bearing ornamental landscape tree. We have allied with them to produce this fine shade tree for our customers.

Considered extremely hardy, the mature trees are drought tolerant and will easily survive winter temperatures to 0°F. The ‘Red Push’ is also known to be adaptable to a wide variety of soil and water types, Verticillium resistant, not known to be allergenic and also long-lived. What a combination! Don’t wait to try this wonderful shade tree.

## Training Trees in the Nursery

One of the most critical issues in a nursery is the training provided young trees. We have committed considerable resources to ensure that our trees go to market with a healthy root system and well developed branch structure.

Allen Bensal, our in-house arborist, heads up our team of tree care specialists. Allen guides the development of the young trees from the time they are released from propagation until they are loaded for shipment. Although he has earned both a bachelor’s degree in business administration and a master’s degree in management, Allen’s real passion is in horticulture. Raised in Michigan, both his father and grandfather were gardening enthusiasts; as a youth he learned the basics of horticulture and grew to love plants, especially trees. During a tour of duty in Germany with the Air Force, Allen gained considerable knowledge in viticulture, the art and science of growing grapes for wine production. He went on to become a highly regarded expert in various aspects of the wine business and for a number of years he was a well-respected wine merchant.

Allen switched careers when he started caring for the landscape associated with a business client and became attracted to the Green Industry while speaking at a Master Gardener conference on the subject of viticulture. With some encouragement from friends he started his own business and for three years provided design/build as well as landscape maintenance services in the Phoenix area. Allen has been with the nursery since 1997, working in customer service and inventory control prior to

caring for our trees. In March of 2003 Allen successfully gained his Arborist Certification through the International Society of Arboriculture. Congratulations Allen!

We are pleased to have Allen working to ensure that our trees are trained properly. During the formative months, his young charges are closely observed so that any trees with structural problems or with inferior graft unions may be culled from the crop. Trees used for revegetation or more natural landscapes receive less emphasis on structural development and Allen allows them to develop as more natural specimens. For trees intended for use in street or parking lot projects he usually develops at least two strong scaffold branches that will provide the low breaks dictated for multi-trunked specimens, yet still create a fairly uniform crown. If needed, trees are then staked to ensure a straight trunk... something that is relatively difficult to do with trees of desert heritage. Often a single short stake affixed with care will encourage the trunk to develop in the manner that Allen desires. He will go through great lengths to train each tree to develop correctly and with the branch orientation desired. The scaffold branches (those that make up the tree’s frame) are sometimes staked as well to develop a more upright growth habit, something that is highly prized by architects and designers.

With Allen’s work, we have greatly reduced the occurrence of twisted trunks and very tight branch crotches, two things that can lead to branch splitting and irregularly shaped specimen trees. We feel you too will be pleased with the results of our signature trees. Allen guarantees it!

## Trees and Irrigation

Just as we take great care in the training of our trees, the care and maintenance should continue in the landscape. One of the most critical issues for desert trees is the irrigation provided. The concept of providing water to desert trees is a much debated topic. We would like to offer our own suggestions for providing water to trees.

Be sure to properly space the drip emitters some distance away from the tree trunk to avoid problems with trunk rot. Initially the root ball should be wetted to support the tree. Provide ample numbers of emitters to encourage the tree to develop a strong root system that is far reaching. Placing shrubs under or near the tree canopy works to provide additional sources of water. Too often we see xeric trees in situations where the trees have not been provided sufficient numbers of emitters spaced away from the trunk. As the tree grows larger the root system fails to grow in proportion to the canopy. These trees are prime candidates for wind throw, generally considered to be the demise of the specimen tree. Consider placing the water delivery tubing in an X pattern or in concentric circles to provide far ranging emitter placement.

Be sure to water deeply to encourage more extensive rooting and to push soluble salts away from the root ball. Space the frequency of the irrigation cycles several days apart once the trees are established to further develop a strong root system and to limit top growth. By reducing the volume of water provided, especially during cooler months, the reduction in foliage development equates to fewer problems with wind resistance and the need to prune.

We certainly hope you enjoy the summer under the shade of a cooling tree canopy.

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*To see photos of these plants and more, check out our website at [www.mswn.com](http://www.mswn.com)*