Concho Valley HORTICULTURE UPDATE

Tree Health in the Concho Valley

It's been a rough past few years for trees in the Concho Valley; the deep freezing temperatures in February of 2021 killed or heavily damaged most Arizona ash trees, and caused varying degrees of damage to live oaks and other species. And the heat wave and drought this year compounded the stress, especially in live oaks.

There are two species of live oak commonly grown commercially in Texas - Southern Live Oak (Quercus virginiana, native to East Texas and along the Gulf Coast), and the escarpment live oak (Q. fusiformis, native to the Edwards Plateau). The southern live oak has less cold tolerance, and the escarpment live oak is more adapted to cold temperatures. Though these are two seperately named species, live oaks cross pollinate easily and most live oaks in the Concho Valley are likely a mixture and have genes from both species and will have varying levels of cold hardiness. It is my opinion that the freeze in 2021 caused vascular system damage to live oaks, in varying degrees based on individual cold hardiness, and the heat of 2023 is highlighting those that were most damaged internally. I believe most live oaks that are showing stress in San Angelo are suffering from a combination freeze damage, heat and drought.

Now is a good time to evaluate and prune dead limbs or remove dead trees of all types that are hazardous to people or property. Dead trees reduce property value, decrease enjoyment of the landscape and curb appeal, and over time the risk of large branches falling increases. Routine pruning to remove dead or damaged limbs can be done any time of year, and is best done before leaves fall in order to identify where cuts need to be made. If pruning any type of oak tree, it is recommended to use sterilized tools and to paint the cuts to help prevent the potential spread of oak wilt disease.

Ask neighbors and friends for referrals and recommendations for tree services and arborists. Choose someone that is bonded or insured to protect yourself and your property in case of damage. Certified arborists have been through a special credentialing process through the International Society of Arboriculture, and can be located through the Find an Arborist tool at: https://www.treesaregood.org/findanarborist

Trees are the most valuable part of the home landscape and it is heartbreaking to see them struggling or dead, but taking action to correct the problem is a start for a new beginning – "The best time to plant a tree was twenty years ago, the next best time is now."

November To-Do's

- After lawns go dormant, drain fuel from mower and other lawn equipment, or add a fuel stabilizer
- Plant trees and shrubs
- Utilize fallen leaves as mulch or add to compost
- Plant spring bulbs

Pecan Update

We will be conducting the annual Concho Valley Pecan show on Friday, December 1st. Entries will be accepted until noon on Wednesday, November 29th. This is a great way to learn what variety of pecans you may have and to receive information on growing pecans in our area. For details on how to enter, contact the extension office at 325-659-6528

Winter Water Conservation



Landscape water conservation may seem like it's only an issue in the summertime, but as we head into the winter season it's important to stay vigilant about saving water and not wasting it. The first step is to turn off the irrigation timer if you have an automatic system. Plants will not need as much, if any water throughout the wintertime. But some plants, like pecan trees, cool season vegetables and winter annual flowers, will appreciate occasional irrigation especially if it's a dry winter. So turn off the automatic timer, but be mindful of the water needs of plants throughout the winter; it will depend on the type of plant and what the weather does.

Ensure that automatic irrigation systems have a rain/freeze sensor installed. This will prevent the system from running if it rained recently, or if it is below freezing. Running irrigation when it's below freezing creates dangerous icy patches in the landscape, sidewalks and street and can be damaging to the system itself. Also protect exterior faucets and exposed pipes by wrapping to protect from freezes. A busted pipe will certainly waste a lot of water, and isn't so good for the water bill either.

Whether using an automatic system or not, when plants do need some water through the winter be sure to follow the same guidelines recommended for landscape water conservation through the summer. Such as: avoid fine droplets or misting in spray irrigation – larger droplets are more efficient. Utilize drip irrigation as much as possible instead of spray heads.

Irrigate based on plant needs, not just a set schedule. Get to know your plants and learn to recognize when they are showing signs of water stress, and/or learn to feel the soil to know if irrigation is needed. Train plants to have deeper roots, by watering deeply and thoroughly but as infrequently as possible. Waiting until the plants really need the water and then watering them well can promote deeper root systems and helps them be more drought tolerant. Drought stressed plants are more likely to be injured by cold winter temperatures, so be sure to water plants if they are dry a couple of days before a predicted hard freeze. Replenish mulch in all planting beds to a depth of about four inches deep, to help keep water in and also to moderate soil temperature and protect roots from freezing temperatures.

Plant Spotlight Swiss Chard Beta vulgaris L. var. cicla

Keep the landscape looking vibrant and attractive all winter long with this cool season vegetable. Varieties like Bright Lights, Charbell, Peppermint, Pink Lipstick and Red Magic are all beautiful with colorful stems



Composting at Home

There are many ways to make the landscape and garden more attractive and productive while reducing fertilizer and pesticide use, and even conserving water. Texas A&M coined the term 'Earth-Kind landscaping' to encompass all these practices such as good plant selection, efficient irrigation, and integrated pest management (IPM) but the foundation for all of it is good soil management. Everything else can be done with lots of planning, research, and diligence but if the soil is ignored, the outcome won't be as successful.

For vegetable gardens and most traditional landscape plants – lawns, shrubs, perennials, groundcovers and annuals etc., the addition of compost goes a long way to helping plants grow better. The exception would be desert plants or things that prefer "lean" soil that is dry, rocky and lacking in organic matter. Remember the phrase 'compost once, mulch forever' for the simplest method of good soil management. It doesn't have to be complicated! When starting a new bed or planting project, till up the soil and apply a threeinch deep layer of finished compost, then mix in as deep as possible. This provides immediate improvement to the soil structure and helps plants grow better. After planting apply a three-inch deep layer of wood-based mulch and keep it replenished to three inches from then on. As the mulch gradually decomposes, it also adds good organic matter to the soil.

For large projects it may be more feasible to purchase bagged or bulk compost, but every home should have a compost bin or pile to utilize valuable organic matter that accumulates through the year. Thanksgiving is a great time of year to start a compost bin if you don't have one. There are fallen leaves to rake up to get it started, and plenty of fruit and vegetable scraps like potato peels, apple cores, and coffee grounds. To learn more, visit the website earth-kind.tamu.edu and view the publication on composting.

To make high quality compost, keep a good balance of oxygen and water, as well as the right balance of nitrogen and carbon. A compost bin needs to have open sides to allow air flow to provide oxygen, and if it gets dry it needs to be dampened. To provide a good balance of carbon and nitrogen just add the right plant-based waste materials. High carbon materials are nicknamed 'browns' and are things like fallen leaves and twigs materials that are tougher and slower to decompose. 'Greens' have a higher nitrogen ratio, and are softer-tissue things like grass clippings and fruit and vegetable scraps. Don't add meat, dairy or fats. Turn the pile weekly to speed up decomposition and create great compost to use in the landscape.

Cold Protection



It looks like the first freeze of the season could happen soon, which would be early - it usually happens mid to late November. So it's time to start getting plants ready for winter. First, bring in tropicals and house plants that have been out for the warm season. Plants like tropical hibiscus and bougainvillea can usually be cut back and overwintered in a garage but a hobby greenhouse or brightly lit room inside the home would be better.

Depending on how cold and early the first freeze is, some gardeners choose to cover their warm season vegetables and perennials to extend production and flowering. This is usually worth it if the first cold spell is short lived, and it warms up for a while afterward. But when cold temperatures set in for the long term, it's usually best to give up on the tomatoes and mums and plant winter vegetables and flowers.

When covering plants, the key is to cover as much ground as possible to utilize heat rising from the soil at night. Don't cinch the covering around the stems, but drape it over like a tent all the way to the ground. Cardboard boxes or large plastic tubs work well.

Some commonly used evergreen plants are only marginally hardy here in the Concho Valley - like rosemary, cast iron plant, pittosporum and palm trees. If there is a particularly hard freeze (usually later in winter), it is helpful to cover them if possible. Better yet, plant them in more protected spots – a microclimate like up against the home or protected from the north wind.

Overall, the two best things to do for plants to protect them from cold temperatures is to water before a hard freeze, and apply thick mulch. Wood mulch helps insulate the roots and can sometimes even mean the difference between coming back the next spring or not for tender perennials like Pride of Barbados and lantana. For heat-loving plants like Pride of Barbados, push the mulch back away from covering the roots in the spring so the sun can warm the soil and help it grow back sooner.

Winter Tree Pruning











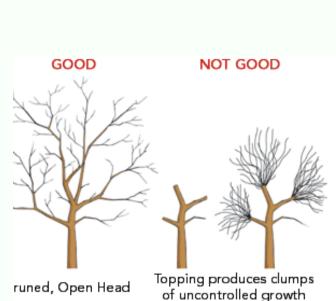


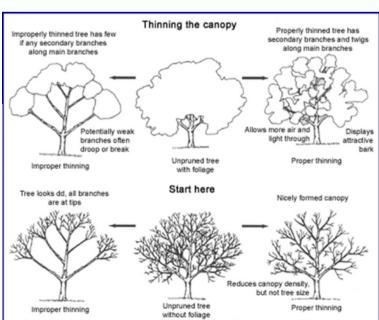
Pruning is one of the major landscaping chores to be done in the wintertime. As mentioned above, most light pruning can be done year-round, but heavy pruning of healthy landscape shade trees is best done in December-January. But get dead limbs removed now, before leaves fall, so it's easier to see which ones are dead. The dormant winter season is especially good for pruning oaks because of the potential spread of the oak wilt disease; oaks should not be pruned or wounded from February through June due to a small beetle that is active in the spring that can spread the fungal disease.

Start with a plan first and carefully choose which limbs need pruning and step back and take a look between each major cut. You can always take more off but can't put it back on! Remove broken, diseased, dead or otherwise problematic branches first. This may be all that is needed. If desired, do training cuts next by cutting back certain lateral branches. Pruning is not a 'quick fix' or one-time solution for structural problems, good pruning is a process and trees should be trained from when they are young and newly planted to have strong attachments and good structure. Even if you hire a professional tree service, it's important to be involved and guide the process. Here are a few basic tips for good pruning techniques.

After removing the dead, damaged or broken limbs evaluate branch angles and the overall structure. Wide angles are stronger, while narrow angles and branches growing close together are weak and have greater chances of failure later. Make carefully planned removal or reduction cuts to promote good tree structure and strength. Branch attachments should have a 2:1 ratio, meaning the smaller branch diameter should be half as wide as the larger branch it's attached to. This kind of training for good branch angles and ratios is much more effective when started on young trees, rather than trying to correct large mature trees. Try to not to cut branches with diameter greater than six inches.

Avoid the unfortunate result of 'lion tails' which can happen when the inside is pruned but the tips of the branches are left intact. Be able to access the entire tree, trunk to tip. Lion tails are stressful to the tree because the tips catch the wind like a sail – the bending and swaying impairs structural integrity. Topping is also not recommended; it is a severe pruning practice that stresses trees and is not needed for landscape shade trees or ornamental trees like crape myrtles.







Thursday, November 9, 12pm-1pm

Prune or Replace? Tree Care in the Concho Valley

Location: Stephens Central Library, Community Room, 33 W Beauregard Ave, San Angelo

Cost: Free

Panel Discussion for homeowners and landscapers with community tree professionals. Discuss the state of landscape trees in San Angelo and pruning/replacement recommendations with:

Garrett Mikulik - ISA Certified Arborist

Michelle David - CoSA Parks Dept

Tony Harris - CoSA Parks Dept

Allison Schwarz - County Extension Agent

Thursday, November 9, 1pm-2pm

PPC Seminar - Rainwater Harvesting-It's Never Too Late

Location: Angelo West Branch Library, 3013 Vista del Arroyo, San Angelo

Cost: \$10

Speaker: Kay Thompson, Concho Valley Master Gardener

Hosted by the People/Plant Connection; Learn how to capture rainwater, the cleanest and best quality water for plants! To reserve a spot <u>Click Here</u> or call Susan Stanfield at 325-656-3104

Friday, November 17, 12pm-1pm

Lunch N Learn Class - House Plants 101

Location: Texas A&M Agrilife Extension Office, 113 W. Beauregard, San Angelo

Cost: \$5

Speaker: Allison Watkins

Hosted by the PPC; Join us for a discussion about selection, planting and care for plants to stay inside the home. To reserve a spot <u>Click Here</u> or call Susan Stanfield at 325-656-3104

For more information on any of the topics, or to ask questions please contact:



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