Concho Valley HORTICULTURE UPDATE

Beneficial Insects to Help Plants

Many homeowners focus on controlling pests in their yard and garden, but it's important to remember to protect the beneficial insects – they are crucial to maintaining a healthy landscape and productive garden.

There are several categories of beneficial insects – pollinators, predators, and parasitoids. Pollinators help provide many delicious crops like watermelon, squash and peaches. Since bee populations have shown concerning declines in recent years we should consider them when planning and managing the home garden and landscape. The easiest way to protect local bees is to be careful with pesticide application. Pollinators like bees and butterflies are sensitive to insecticides, and overuse can reduce their numbers. Only use pesticides when needed, and then be sure to use the correct product and follow the label directions. Try to use the most targeted product possible, instead of broadspectrum and only apply to the plant in question. Chemical pesticides can be helpful if used properly and moderately, but overuse can lead to worse pest populations because of the effect on beneficial predators and parasitoids.

Predators are insects that kill and consume other insects. Some are specialized like ladybugs and green lacewings, they are particularly fond of aphids. Others have more broad taste, like preying mantis – they will eat whatever they can catch. Parasitoids are parasitic insects that lay eggs on a host and kill it as they develop. Together, these beneficial insects do a lot to keep pests insect populations down in the yard and garden.

Another way to help bees and butterflies is to plant pollinator-friendly plants. Some great choices for the Concho Valley include catmint, Gregg's mistflower, lantana, bee balm, blackfoot daisy, esperanza, African blue basil, blackeyed susan, bulbine, globe mallow, salvia, zinnia, and turk's cap.

Insects are often seen as unwelcome guests to the garden, and while some can be very damaging remember that there are many that we need – it is a fine balance. When insects are found in the landscape, correct identification is important before attempting to control them. For help in identifying, feel free to contact the Extension Office with a photo or a sample.

April To-Do's

- Deadhead flowering annuals and perennials to extend blooming period
- Replenish mulch as needed in all beds
- Apply bait for fire ants
- Fertilize lawn based on a soil test; if needed apply 5 pounds of 21-0-0 fertilizer per 1,000 square feet
- Plant warm season vegetables

Pecan Update

Save the Date! Tuesday May 9th there will be a Listening Session with staff from Texas A&M on PRESERVING TEXAS' PECAN LEGACY

What do you need help with? How can we can work together to sustain pecan growing in Texas? Help set the priorities. We want to listen!

More info TBA

Patio Plants



Spring is here and while it's possible to have a frost as late as April, most gardeners are getting their tomatoes in the ground and planting flowers in patio pots. Potted plants do require more frequent attention than plants in the ground; since the pots are exposed to the wind and sun they can dry out faster. That doesn't mean they have to waste a lot of water; be creative and come up with some ways to recycle water from household use to supplement irrigation. Dip out dishwater from the sink, use a bucket to catch some water in the shower while it's heating up, pour out leftover ice from an ice chest into a planter, divert grey water from the washing machine. Every drop counts! Also - use mulch. Its benefits are not limited to garden beds, mulch can be useful for containers to keep roots cool and prevent evaporation, allowing the root systems to have access to more water.

If weeding isn't your favorite gardening chore, then potted plants are a great way to go. Container-grown flowers and vegetables have very few, if any, weeds! Don't use real soil for potted plants, get peat-moss based potting mix. Potting mix does not have weed seeds like real soil does, and maintains a better structure for potted plant roots. Compost can be added to potting mix but don't add more than a third of the volume of the container. At least 2/3 of the mixture needs to be potting mix/soil substitute to provide the best foundation for roots.

Some good choices to try for annual color on a porch or patio include pentas, ice plant, petunia, begonia, moss rose, marigold, and zinnia. Vegetables that do well in containers include patio tomatoes, peppers, cucumber, sweet potatoes, and squash. For the larger, vining vegetables, plant in a large container and leave room around the planter for the plant to trail down and out.

The Concho Valley Master Gardeners are hosting a spring workshop on Saturday, April 22nd from 1pm-5pm at the Tom Green 4H Center. One of the breakout sessions will be planting containers to take home! Cost to attend is \$30 and pre-registration is required, to sign up visit tomgreen.agrilife.org/

Plant Spotlight Citronella Geranium

Pelargonium 'Citronella'

This lovely green annual plant is great to have on the porch or patio! Pick a leaf and crush it in your hand to extract mosquito-repelling scent; rub it on your arms and legs to discourage the pesky insects from biting.

Grow in a location with plenty of light to keep the plant full and prevent legginess. Plant in a large container and keep watered when the top of the soil dries out.



Spring Pecan Tree Care

There are a lot of things to keep in mind for pecan tree care in the spring. Right now is the time to consider a foliar zinc spray and nitrogen fertilizer application, make plans for irrigation, and be on the lookout for pecan nut casebearers, a small moth that destroys developing nutlets. For homeowners that just want to keep their trees alive and looking attractive for the landscape, watering is the main consideration. For those that want to harvest a good crop in the fall, nutrition and pest control are necessary also.

Zinc helps with leaf expansion, and zinc deficient leaves are small and stunted. Leaves are the 'food factories' for the plant, and if stunted will not be able to do enough photosynthesis for a good crop. Pecan trees are not able to absorb zinc through the soil well, so a foliar spray is required for the tree to take it in. The first application should be in the spring during initial leaf expansion and can be repeated two more times when there is new growth in the canopy.

Nitrogen on the other hand is not well absorbed in the leaves and is most effective when applied to the ground and watered into the roots. Apply 1lb of ammonium sulfate (21-0-0) per inch of trunk diameter around the drip line of the tree and water in. Don't fertilize before a predicted heavy rain, as that would likely wash the fertilizer down the street with the stormwater runoff.

The pecan nut casebearer ('PNC') pest should be evaluated locally at each home or orchard. Trees with a heavy crop set may not need treatment because lessening the crop can increase nut size and quality if it starts out overloaded. But for trees with a lighter crop or with a heavy PNC population, treatment will help protect the harvest. Each grower should inspect their trees to get the best timing for treatment, but we do provide an email announcement each spring to those interested in receiving a spray date recommendation. To sign up visit tomgreen.agrilife.org/horticulture.

Of course irrigation is also key for a healthy tree and plentiful harvest. Pecan trees are not drought tolerant species and require steady irrigation when there is no rainfall. Plan to water the dripline weekly when there is no significant rainfall.

If you noticed last fall that you had pecans that looked full sized and good quality but were hollow and had holes, that is pecan weevil damage. The time to look out for and treat those is in August. Visit the website tomgreen.agrilife.org/horticulture/ for a publication on West Texas Pecan Management and also a publication on Controlling Pecan Pests.

Mature Tree Care

Large, mature landscape trees are very valuable to home landscapes and provide a lot of enjoyment because of their beauty and the shade they provide that keep the home and yard cooler in the summer. Those homeowners lucky enough to have big trees usually have one goal – keep it alive. Depending on the type of tree, this can be fairly simple – just don't do anything to damage or stress it. Some trees, like pecans, need quite a bit of effort to keep them happy, such as frequent irrigation, fertilization, pest control etc. But live oaks, cedar elms and other well-adapted trees are pretty resilient and can usually get the water they need from rainfall, and the nutrients they need from the soil.

Knowing the root system is the first step to keeping trees healthy. Roots need oxygen and water, so they grow most abundantly where they can easily get both – close to the surface. While trees do grow some deep roots to help with stability, most roots are in the top six inches of soil and they spread out far and wide away from the trunk. While many mature, well-adapted trees can get by mainly on rainfall during normal years, when we have extended periods of drought it's very helpful to the tree to provide supplemental irrigation. But to be effective, it needs to be applied near the dripline, not at the trunk. For trees that have high water needs like pecans, they need to be irrigated in addition to what the turfgrass and other landscape plants are getting.

Knowing where the roots are is also important for protecting the tree from damage. Construction, trenching for plumbing or irrigation, application of pesticides etc can all have major impacts on tree health. Don't dig trenches near tree trunks, or create driveways, or do other projects without protecting as much of the root zone as possible – at least to the dripline, which is as wide as the canopy of the tree. Some weed and feed products, such as those containing the active ingredient atrazine, should not be applied to the rooting zone of trees. This herbicide in particular is good at moving through soil and can be taken up by tree roots, damaging the tree.

When trees start to slowly decline, it's rarely one single cause that is stressing or killing the tree, it's usually a combination of several factors contributing to the problem. Tree stress is very hard to diagnose and even harder to fix, so the best bet is to provide the best cultural management – start with planting a good tree species for the area, protect it from damage, and provide proper cultural management when needed such as irrigation and fertilization.

Home Grown Food













There are many ways to incorporate edible plants into the landscape; even if you don't have a ton of space for a huge garden, it's not only possible but very beneficial and highly recommended to plant some vegetables, herbs and fruit in the yard. First, consider vegetables and herbs that can be planted now and will provide a pretty quick harvest. Also, take this opportunity to realize the advantage it is to have permanent edible plants in the yard - they make take time to establish before they provide a good harvest, but it's a worthwhile investment!

Now is a great time to plant warm season vegetables; Texas A&M promotes the Earth-Kind method of gardening, to reduce the need for fertilizers, pesticides and water. Earth-Kind helps promote personal health and safety as well as the conservation of natural resources. In my opinion, some of the spring and summer vegetables that can best be grown in an Earth-Kind manner include okra, peppers, sweet potato, magda variety squash, and heat tolerant tomatoes. These can all take the heat of west Texas and will grow well without excessive inputs. Magda squash is a specific variety with a nice nutty flavor that is less prone to squash bug infestation (but not immune).

Five more Earth-Kind suited vegetable that are for the cool season and should be planted later in the fall or winter, include carrots, swiss chard, onions, spinach and asparagus. The herbs I recommend as the best Earth-Kind options and the most usable for cooking include sage, rosemary (dwarf varieties are recommended for smaller spaces), basil, chives, oregano, thyme, and mint. Parsley, garlic, and cilantro are great choices for fall/cool season planting.

Some of the easiest to grow fruits for Texas include pomegranate, Asian persimmon, fig, blackberry, pear (be sure to choose the right variety – for a list of recommended varieties visit tomgreen.agrilife.org/horticulture/), and grape (juice or jelly varieties, like champanel).

Spring Lawn Diseases

Many homeowners take pride in having a dense, green lawn – and many wish they could but struggle with the challenges of growing healthy turfgrass in the west Texas climate. Lawns are an important part of the home landscape that can add a lot of enjoyment and can increase property value. This time of year, some common problems to watch out for are various fungal diseases, and later in the year summer insect pests like chinch bugs and grubs can cause problems. But other factors to consider include deep shade, compacted soil, or misaligned sprinkler head, just to name a few

Common turf diseases this time of year include grey leaf spot, take-all root rot, and brown patch. Take-all root rot is a very common concern and there are many questions on it every year. Take-all root rot is a fungal disease that can affect any type of turf, but is seen a lot in St. Augustine lawns. Like the name says, it causes the roots to decay which causes large dead areas, and it is most active in the spring and fall.

The pathogen really thrives in alkaline conditions, and prefers frequent irrigation and excessive nitrogen applications. It is also an 'opportunistic' pest, meaning it's usually not able to damage an otherwise healthy lawn, but if anything stresses the grass, the fungal spores are able to infect the grass.

Keeping the lawn healthy is key to preventing this disease; deep but infrequent irrigation is much better than light, frequent watering for other reasons but is also important regarding take-all. Don't over apply nitrogen – do a soil test to find out exactly how much, if any, nitrogen is needed. This is a good example of why identifying the cause is important, and why it's not a good idea to just give extra water and fertilizer to stressed turf. Fungicides can be helpful for control, some of the fungicides that are labeled for and effective against take-all include azoxystrobin (trade name Heritage G), thiophanate-methyl (trade name Cleary's 3336) and propiconazole (trade name Banner Maxx). There are also other trade names and generic options available for each.

Another recommendation is to top-dress the lawn with peat moss. Peat moss creates a more acidic environment around the turfgrass, which is unfavorable to the pathogen. Apply one to two bales of peat per thousand square foot and rake into the grass. For more info, visit https://tomgreen.agrilife.org/horticulture/.



Master Gardener Plant Sale

Location: Tom Green 4H Center, 3168 N US 67, San Angelo

The Master Gardeners have grown a lot of beautiful plants for their annual plant sale! Come check out the selection of locally propagated plants that are all well-suited for the local climate. Contact the Extension Office at 325-659-6528 for info or email Allison at allison.schwarz@ag.tamu.edu. More details and plant list available at txmg.org/conchovalley

Thursday, April 13, 2pm-4pm

PPC Seminar - Gardening for Wildlife

Location: Tom Green County Extension Office, 113 W. Beauregard, San Angelo

Cost: \$20

Speaker: Kay Thompson, Master Gardener

Hosted by the People Plant Connection; Learn how to attract desirable wildlife and provide a good habitat for them! To reserve a spot Click Here or call Susan Stanfield at 325-656-3104.

Friday, April 21, 12pm-1pm

Lunch N Learn Class - Landscape Irrigation and Drip Systems

Location: Tom Green County Extension Office, 113 W. Beauregard, San Angelo

Cost: \$5

Speaker: Allison Watkins

Hosted by the PPC: Join us for a discussion on how to keep the yard and garden watered without wasting it. To reserve a spot Click Here or call Susan Stanfield at 325-656-3104

Saturday, April 22, 1pm-5pm

Spring Earth-Kind Workshop

Location: Tom Green 4H Center, 3168 N US 67, San Angelo

Cost: \$30 - must pre-register by 4-18-2023, visit tomgreen.agrilife.org

Join the Master Gardeners on Earth Day for a fun afternoon of learning - through seminars, hands-on breakout sessions and tables to visit! For schedule, info and to register visit tomgreen.agrilife.org

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



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